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OUR 1898 DIARY.

ALL subscribers' copies of the 1898 DIARY for Australia were despatched by last week's mail, and those for North and South America, South Africa, India, and the East, the continent of Europe, and other foreign parts have been sent away early this week, therefore all should be delivered in good time for use before the new year.

Subscribers' copies for London and the large provincial towns are now being rapidly delivered by the Globe Express (Limited), and the balance for the small towns will be forwarded by parcel-post on Saturday or Monday the latest. The diaries are carriage-paid, or post-paid, as the case may be, therefore there should be no charge made at the time of delivery. In each copy of the DIARY is a coupon entitling the receiver, or his deputy, to compete

TEN GUINEAS IN PRIZES,

which will be awarded to those who give replies to the following questions nearest to the general opinion :-

1. Whose advertisement is best calculated to promote business?
2. Which illustration or design do you consider most attractive?
3. Which advertisement, occupying a page, do you consider the best?
4. Which advertiser, who has less than a page, utilises his space to the best advantage?
5. Vote for the proprietary article advertised in the DIARY (medical, or of any other character) which has your best wishes.
6. Which is the most happily named article advertised?

As on the last occasion we shall endeavour to make the first prize 5*l.*, so that it will pay everyone to try. Additional copies of the DIARY, while available, may be had by subscribers from the publisher for 2*s.* 6*d.* per copy. The price to non-subscribers is 3*s.* 6*d.*



SUICIDES of an English and a Scotch chemist are reported (pp. 859-60).

SOME INSTRUCTIVE DISPENSING NOTES were discussed by the Liverpool Students' Society (p. 874).

WE GIVE on p. 875 a graphic account of how the gum-bichromate process of photographing is done.

MR. J. ANDERSON RUSSELL objects to members of the North British Branch Executive being elected examiners (p. 866).

AN APPEAL by the Badische Anilin fabrik, concerning a dye patent, has been heard by the House of Lords (p. 877).

MR. DAY, MR. GLYN-JONES, and others continue the discussion on the P.A.T.A. in our correspondence columns (p. 897).

THE MANAGER of one of the Day's Metropolitan Drug Company's Stores has died, it is alleged, from business worry (p. 858).

A GROCER at Swindon has been fined 20*s.* and costs for selling quinine wine containing about $\frac{1}{2}$ gr. of salicylic acid per oz. (p. 878).

AN INSTRUCTIVE NOTE, by Mr. James O'Sullivan, on the enzymes concerned in the brewing and distilling industry, is printed on p. 872.

IRELAND has an intermediate pharmaceutical examination, and the assistants in Dublin have voted that it is not necessary (p. 874).

MR. DOWNES, President of the P.S.I., shows in a Dispensing Note how the "Hazeline" suppositories can be compounded (p. 899).

PROVINCIAL ORGANISATION has been discussed by Midland chemists, and the same meeting rather severely criticised Scotch chemists (p. 871).

THE CHARGE against the man who sold spurious Dr Williams' pink pills for pale people in 6*d.* boxes has been dismissed owing to a technicality (pp. 877 and 883).

AT A MEETING of the Edinburgh Chemists' and Druggists' Association a prize-competition scheme for chemists' assistants was adopted, and some other business transacted (p. 860).

THE NEW PHARMACEUTICAL EXAMINERS are:—For London: Messrs. E. H. Farr, Professor Harvey Gibson, Dr. F. S. Kipping, Mr. A. J. Phillips, and Mr. J. E. Saul. In Edinburgh: Mr. George Lunan and Mr. James Jack (p. 862).

THE PHARMACEUTICAL COUNCIL, on Wednesday, removed the names of Mr. George Ellinor (Sheffield), and Mr. T. J. Forshaw (Bradford) from the membership of the Society (p. 864).

THE GENERAL MEDICAL COUNCIL has concluded its autumn session, and has passed the new Pharmacopœia for publication. We report a number of the penal cases heard by the Council (p. 885).

THE NORTH BRITISH BRANCH had a busy time last week. A dinner was held on Thursday, and a meeting of the Executive and an evening meeting on Friday. At the last mentioned Professor Walker, of Dundee, gave an admirable address on "The Ionisation Hypothesis." We report all the meetings on pp. 865-870.

THE DRAFT PHARMACY BILL, proposed by the Pharmaceutical Council, is printed on p. 862. It provides for all chemists and druggists becoming members of the Society, and those who pass the Preliminary examination student-associates. It is proposed that one-third of the Council shall retire annually, and that the distinction between chemist and druggist and pharmaceutical chemist members shall be removed.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

A Chemist's Death from Worry.

On November 26 Mr. Braxton Hicks, Coroner, held an inquiry at Richmond as to the death of Peter Martin Akeroyd (31), a registered chemist and assistant general manager to Day's Metropolitan Drug Company, lately residing at 186 Queen's Road, Peckham, who died on the previous Monday under very sad circumstances.

Charles Edwin Akeroyd, chemist and druggist, of 22 Crescent Road, Plumstead, identified the deceased as his brother, and stated that his health had been good, but he had latterly been rather depressed. The witness last saw him on Sunday, October 21, when he was in the same condition. He was married, and had one child.

Mrs. Martha Annette Akeroyd, the widow, who expressed a wish to give evidence, stated that when her husband left home at 8.30 on Monday morning he was very depressed, as he had been for six weeks. He said he had had a dreadful amount of work, and he was worried because his employers were not satisfied with him. A week before his death he had complained slightly of his head. He had seen a Dr. Pritchard about his health.

Ernest Thomas, a chemist, and an assistant at Day's Metropolitan Drug-stores at Harewood House, Walham Green, deposed that the deceased, whom he had never seen before, came there on Monday morning and gave instructions for certain work to be done. He was very quiet, and gave witness the impression of a man working at high pressure. Witness saw him receive a telegram, saying "Manager at New Cross ill; not turned up." He left at 11.30, but he did not notice which way he went.

James Simmons, gatekeeper at the Isleworth Ferry entrance of Kew Gardens, stated that he saw the deceased pass his gate at a quarter to 3 P.M. He was smoking, and remarked that the fog was clearing off nicely. He walked in the direction of Richmond. At 3 minutes past 4 he saw him going towards Kew, and later on he heard a gentleman named Moore asking him whether he was unable to speak. Witness went towards him, and afterwards called Dr. Fincham's attention to him.

Henry Hemmerson, of Brentford, said he was passing Kew Gardens when he saw the deceased sitting on a seat. He had his arms up and his hands clenched. Witness remained with him for ten minutes, to prevent him from falling into the water. He seemed very ill.

Dr. W. S. Fincham, of Kew Bridge Road, deposed to being called to the deceased, who was quite dead. By the Coroner's order he subsequently made a *post-mortem* examination. He found the brain very congested, and there was a rupture of a vessel under the upper part of the medulla, and the blood had flowed down over the spinal cord. Death was due to apoplexy of a very rare form. The stomach was nearly empty; there was no sign of an irritant or any other poison. The bleeding from the emissary veins would produce immediate insensibility.

By the Coroner: It was quite possible that he had had enough of the work, and, feeling sick and tired of the whole thing, thought he would go for a walk to clear his brain. He saw nothing wrong with the brain to suggest that the deceased had hallucinations. Worry would account for the whole mischief. There was no sign of softening of the brain. Taking things to heart would account for the congested condition of the brain. A man in his condition would worry over things more than ordinary men.

The Coroner: Probably the extra hard work attending the opening of new shops?

Witness: Yes.

At this juncture the widow said her husband had had an altercation with one of the directors.

Mr. Edward Thomas Pritchard, chemist and druggist, and a director of Day's Metropolitan Drug Company, denied that he had had an altercation with the deceased. Witness had occasion to speak to him with reference to work, but found no fault with him; in fact, they had a cigarette together, and the deceased dined with him afterwards. They had not opened a shop for some time. It might be that the deceased was worried.

The Widow: He told me that he had had an altercation with you because you threatened to investigate his expenses sheets, insinuating that he was dishonest.

Witness: It is absolutely false.

The Widow: You told him he would not get a reference.

Witness: It never occurred.

The Widow: If it was not an altercation it was a dispute, or why did you get out of three smoking-compartments?

The Coroner: I cannot investigate a dispute between employer and employed.

A Juror: I don't think we ought to listen to it. ("Hear, hear," from the other jurors.)

The Coroner (to Mr. Pritchard): I see that on November 19 you wrote to the deceased thanking him for his very full report.

Mr. Pritchard: Yes.

The Widow: His work was most disconnected and unbusinesslike; so that was sarcasm!

The Coroner: I have closed my inquiry.

The jury returned a verdict of death from natural causes.

Mr. Pritchard said that, as far as the office was concerned, there could be no question of money, as the deceased had nothing to do with the cash taken at the branch shops.

A gentleman, whose name did not transpire, said he was instructed by the directors of the company to say that they deeply regretted Mr. Akeroyd's death, and were exceedingly sorry to lose him.

Local Chemists Get the Contract.

The recent movement of the chemists and druggists of Macclesfield to secure an opportunity of tendering for the supply of drugs to the workhouse has proved successful. Hitherto the contract has been given to a Leicester firm, but the Guardians now invite tenders from the chemists of the town.

A similar point was raised at the meeting of the Medway (Kent) Guardians on November 25. Among the orders presented for confirmation was one for 1 cwt. of Jeyes' purifying soap from a London firm. Mr. Lamb pointed out that this soap could be obtained from the druggists of the town, and at a cheaper rate than from London. The Chairman said he could not understand how the order came to be on the books, as some time ago it was decided that the orders should be given to local firms. The Clerk was directed to see that the wishes of the Board were carried out in future.

Burglars at a Drug-store.

On the night of November 26 burglars entered the Grant-ham establishment of Boots, chemists, by breaking a window and unfastening the catch. The visitors helped themselves to some malt-and-meat wine, lemon-squash, and soda, tasted some anchovy-sauce, and before leaving washed themselves with scented soap. The only clue is a big clasp-knife, which the marauders forgot to take away with them.

The Herbalist's Neighbourly Feeling.

At an inquest held on November 26, at Bradford, it appeared that a Mrs. Foulds, aged 47, suffered from bronchitis, and when her husband asked her whether he should fetch a doctor, she replied, "Go to Mr. Scurrah's, and get a bottle of medicine." Mr. Scurrah said he was a medical botanist. He never wanted to take up the case, but was drawn into it by "neighbourly feeling." He said he visited deceased, and prescribed for her. He examined her chest with a stethoscope, and found she was very weak, and that her temperature was 102°. Subsequently, on learning that she had died, he sent a certificate of death. He admitted that he had made a mistake in not advising the friends of the deceased to call in a medical man, but he did not think anything could have

saved her. That, said the foreman of the jury, was just the reason why you should not have taken the responsibility of treating her. Eventually the jury returned a verdict of death from natural causes, and expressed the opinion that Scurrah had been guilty of a serious error of judgment, but not of criminal or culpable negligence.

Chlorate-worker's Painful Death.

At St. Helens last Saturday afternoon, Charles Ward, an employé in the chlorate-mill at the works of the United Alkali Company, was walking with his foreman in College Street, when he stopped to strike a match to light his pipe. His clothes were at the time saturated with chlorate, and as soon as he struck the match he was enveloped in flames. The passers-by were at first dumbfounded to see the man with the flames towering above him, and the poor fellow in his agony rolled into the middle of the road. The foreman and others went to his assistance, but his clothes were then literally burnt off his body. He was taken to the hospital, where he died the same night.

Suicide of an Eastbourne Chemist.

While some Eastbourne lads were playing football on November 26, in South Fields, one of their number found the body of a middle-aged man lying face downwards under the wall which divides Sussex College Ground from Gildride Park. A bottle, which had contained prussic acid, was found in the deceased's hand. The body was identified as that of Mr. Benjamin K. Earnshaw, who resided at Grassmere, Furness Road, and carried on business as a chemist at the corner of Victoria Place and Seaside Road. An inquest was held on November 27, when Dr. Willoughby, who was called to deceased on November 26, at the local Police Station, said he must have expired some time on the previous night. In his right hand deceased clenched a bottle which contained strong prussic acid, and this bottle was about two-thirds full when found, and was then stoppered. In reply to the jury the witness said deceased would have been able to stopper the bottle after taking the acid, especially because of his familiarity with bottles and stoppers. Mr. Earnshaw's son identified the body and said his age was 55 years. He had suffered greatly from neuralgia and insomnia. A paper in deceased's writing—"Brain gone wrong; forgive"—was produced; but Mr. Earnshaw, jun., said he had never known his father to threaten suicide. Deceased's health had failed since his wife's death in 1894. The jury's verdict was "Suicide while of unsound mind," and they expressed sympathy with the surviving family.



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Personal.

Mr. George Strong, L.P.S.I., has resigned the managership of McAdam's Pharmacy, Kingstown, and has come to Dublin.

Mr. J. Ashe, L.P.S.I., late of Messrs. Graham's State Pharmacy, Westmoreland Street, Dublin, has been appointed to Messrs. Anderson & Adam's Medical Hall, Grafton Street, Dublin.

Mr. Robert Cambridge, registered druggist, Carrickfergus, was second on the poll at the Municipal Election for Commissioners on November 25. There were thirty-three candidates for eighteen seats.

Mr. J. Tyrie Turner, M.P.S.I., Hon. Treasurer of the Irish Pharmacists' Assistants' Association, took part in the management of the annual Scotch musical festival—the Caledonian concerts—held last week at Dublin.

Aërated-water Bottles.

On Monday last, at the Galway Petty Sessions, Messrs. A. & R. Thwaites & Co. (Limited), chemists and mineral-water

manufacturers, Dublin, proceeded under the Merchandise Marks Act against Mr. M. Young, mineral-water manufacturer, Galway, for using their bottles for holding his soda-water. The prosecutors' counsel said he did not allege fraud, but proved by witnesses that a number of bottles of the defendant's soda-water had been bought in Galway in Thwaites's bottles. The defendant admitted that he was guilty of a technical breach of the Act, but said it was difficult in the mineral-water business to prevent a bottle or a few bottles belonging to other manufacturers from getting mixed up. The Magistrates imposed a fine of 5*l.*, with 5*l.* costs, in each of the two cases.

Business Movement.

Messrs. Hayes, Conyngham & Robinson (Limited), Dublin, are about to open a branch pharmacy in the King's County.

Society of Apothecaries' Examiners.

At a meeting last week of the Governor and Court of the Apothecaries' Hall of Ireland the following examiners were appointed:—Chemistry and physics: E. Davy, N. Hartley, and C. R. C. Tichborne. Pharmacy: W. V. Furlong, L.A.H., and G. A. Stritch, L.A.H. Materia medica: John Evans, L.A.H., M.P.S.I., and S. M. Thompson, L.A.H. Anatomy: A. Bermingham. Biology: A. J. Blaney and J. A. Johns, L.A.H. Physiology: D. J. Coffey and G. B. White, L.A.H. Hygiene: D. F. Flynn and A. Roche. Medical jurisprudence: H. A. Auchinleck, L.A.H., and J. E. Kenny, L.A.H. Pathology: E. J. McWeeney and C. M. O'Brien, L.A.H. Midwifery and gynecology: T. M. Madden and R. D. Purefoy, L.A.H. Ophthalmology: A. H. Benson and R. J. Montgomery, L.A.H. Surgery: A. Chance, L.A.H., and H. A. Thompson. Medicine: W. E. A. Cummins, L.A.H., and J. B. Coleman.

The Rival Baking-powders.

The Queen's Bench Judges who heard the appeal case between Messrs. Wright, Crossley & Co. v. Dobbin & Co. gave judgment on November 24. The defendants were summoned for selling an American baking-powder called "Royal" and on the labels appeared the word "registered," implying that the word Royal was a registered trade-mark. The mark was registered in America, and had been registered in England, but had been removed by Mr. Justice Romer. Notice of this had been given to Dobbin & Co., but they, having received an indemnity from the American Royal Baking Powder Company, continued to sell the article with the word "registered." The Belfast Magistrate found that there was no offence committed. The High Court now unanimously held that the Magistrate was wrong, and sent the case back to Belfast. On the same day the Vice-Chancellor gave his decision in the case of the Royal Baking Powder Company v. Ycung. The company applied for an interlocutory injunction to restrain the defendants, also a Belfast firm, from using the word "Royal" in connection with baking-powder other than theirs. The Vice-Chancellor refused the interlocutory injunction, but reserved the question of costs until the hearing of the action.

A Guardian's Risk.

On Monday, at the Nisi Prius Court, Dublin, Mr. Edward Moore, proprietor of the Medical Hall, Castle Island, brought an action against a local shopkeeper, named Hogan, to recover 1,000*l.* damages for alleged slander. From the evidence it appeared that the plaintiff had been acting as temporary dispensary officer, and the slander consisted of a statement made by the defendant at a meeting of the dispensary committee, of which he was a member, that the plaintiff charged a dispensary patient 2*s.* 6*d.* for a bottle of medicine; that it was wrong and improper to charge free patients for medicine, as it was paid for already out of the rates. The defendant pleaded absence of malice and privilege, and also that he had made the statement in the discharge of his duty as a Guardian of the poor. The plaintiff was examined, and denied the allegation. His version of the affair was that the patient in question came to him as one of the general public and offered to pay rather than seek dispensary relief. This was borne out by the patient, who deposed that having finished the first bottle and learning that a "repeat" of the medicine would cost 2*s.* 6*d.*, declined to take it, and the matter dropped so far as he was

concerned. The defendant, in cross-examination, admitted that the story reached his ears through a third party, and as soon as he learned the truth of the matter he withdrew the charge he had made against the plaintiff and apologised. The jury, after two hours' deliberation, found a verdict for the plaintiff for 10% damages.

A Bankrupt Chemist's Estate.

Notice has been issued by the Court of Bankruptcy in Ireland that on December 3 all the estate and interest of Thomas Hickey, L.A.H., in his premises, the Medical Hall, Parliament Street, Dublin, will be disposed of by public auction at the Four Courts, in connection with Mr. Hickey's bankruptcy.

The P.A.T.A.

Meetings of chemists have been arranged at Dublin and Belfast for Friday, December 3. The Secretary, Mr. Glyn-Jones, is expected to be present at both.



Presentation.

Mr. William Thomson, chemist, Bearsden, was last week presented with a purse of sovereigns by a large number of his friends on the occasion of his going into business on his own account in Partick.

A Dissolution.

The firm of James Robertson & Co., aerated-water manufacturers, Edinburgh (which was formerly annexed to the well-known George Street pharmacy), has been dissolved by the retirement of Mr. Thomas Thompson, chemist and druggist. Mr. Harry Rawson, the sole remaining partner, will carry on the business under the old style.

Glasgow School of Pharmacy.

Mr. J. Lothian, Principal of the Glasgow School of Pharmacy, delivered a lecture on "A Trip to Paris," in the lecture-room of the school on November 26. The lecture was illustrated by sixty lime-light views, and was listened to with much interest by a large number of students and their friends, including many ladies. Mr. Lothian was heartily thanked for his lecture.

Photo Medallists.

Mr. Thomas Jardine, town traveller for Messrs. T. & H. Smith & Co., Edinburgh, is this year the recipient of the silver medal of the Midlothian Camera Club. The medal is presented for competition by the Marquis of Lothian, K.T., and is awarded to the member whose work scores the highest number of votes during the session. The club's bronze medal, which is awarded to the member who scores highest in the special competition for quarter-plate prints only, has been gained by Mr. D. H. Sclater, town traveller for Messrs. Raimes, Clark & Co.

Suicide of a Perth Chemist.

The body of David Donald, chemist and aerated-water manufacturer, Perth, who had been visiting friends at Peterhead for the past few weeks, was found on Monday behind a fence in a field at Blackhouse, about two miles north of Peterhead. After having dinner on Saturday, deceased left for the purpose, as he said, of taking a walk, but not returning in the evening his friends became very anxious about him, especially as he had recently been showing indications of partial weakness of mind. A search was instituted in the district, and continued throughout Sunday without result; but on Monday afternoon he was found by a boy with his throat cut and the artery of one arm severed. Life was extinct. Deceased was 49 years of age, and unmarried.

Edinburgh and District Chemists' Trade Association.

A meeting was held at 36 York Place, Edinburgh, on Tuesday morning, Mr. J. Bowman (President) in the chair. There was a small attendance.

The Chairman, in opening the proceedings, remarked that the purpose of their Association was defence, not defiance. They did not throw down any challenge. They recognised the futility of attempts to save them from unfair competition. He dealt with the company-question as applied to pharmacy. It might be urged, he said, that this evasion of the Act was for the benefit of the public, but he questioned that, because the tendency undoubtedly was to lower the tone of the chemist and the quality of the medicine he dispenses. It was the function of the Association to direct attention to, and, if possible, remedy anything which pressed unfairly on their businesses. His opinion was that the salvation of society lay in the proper blending of individualism and collectivism. (Applause.)

Mr. C. F. Henry (Secretary) read a report, which stated that the committee recommended a prize-scheme in connection with the Association. They suggested that the competition should be open to all chemists' assistants and apprentices employed within the area from which the Association draws its membership; that two prizes (2*l.* 2*s.* and 1*l.* 1*s.*) be offered; that the subjects of examination be commercial or local questions bearing on pharmacy; and that a set of such questions be drawn up, printed copies of which, addressed to the assistants and apprentices, should be sent to the shops of chemists within the area. Mr. Henry explained that the committee considered that it would serve the purpose they had in view if the competitors consulted books or asked their masters in regard to the answers. After a good deal of discussion, the scheme as proposed was agreed to. Messrs. Boa, Burley, Lunan, Hill, and Henry were appointed a committee to carry it out.

Mr. Henry said he had received a letter from a member suggesting that they should approach the wholesale chemists and ask them to reduce the order for patent medicines on which carriage would be paid from 5*l.* to 3*l.* or 2*l.* After some discussion it was agreed to send a letter on the subject to the wholesale chemists.

Mr. Henry said he had received a communication from the Trade Defence Association asking them to associate in a meeting, and to get the loan of the Society's house for it. Mr. Henry, Mr. D. McLaren, Mr. Peter Boa, and Mr. T. McKenzie objected to commit themselves, and nothing was done.

The Ball Committee was reappointed, and the annual ball was fixed for January 20. Mr. McLaren intimated that Mr. Moir (Glasgow) wished the Edinburgh Bowlers' Association to play the Glasgow Association either at Edinburgh or Glasgow.

French News.

(From our Paris Correspondent.)

LAVOISIER'S STATUE is to find a site in Paris behind the Madeleine Church, at the top of the rue Tronchet. The famous chemist resided for many years in a house near this spot.

PENSION FOR A CHEMIST'S WIDOW.—The Paris Municipal Council have voted an annual pension of 3,000*f.* (120*l.*) to Mme. Schützenberger, her late husband having been Director of the School of Physics and Industrial Chemistry belonging to the City of Paris.

STATUE TO PASTEUR AT MELUN.—On Sunday last, November 28, a statue to Pasteur was inaugurated at Melun, the special object of which is to commemorate the discovery of anthrax vaccine, made by Pasteur at Pouilly-le-Fort, near Melun. The monument takes the form of a bronze bust of Pasteur, on a stone pedestal. There are two bas-reliefs. One portrays a scene of inoculation by the deceased scientist, and the other a shepherdess followed by a lamb. The principal speech was made by M. Nocard, director of the Alfort Veterinary School. According to him we are only at the commencement of the era of Pasteur's triumph. Before Pasteur agricultural regions were periodically devastated by

maladies of which preventive vaccination has rendered us master.

THERAPEUTIC SERUMS.—In accordance with a law passed in April, 1895, therapeutic serums cannot be sold or distributed gratuitously in France without Government sanction, which is given on the advice of the Paris Academy of Medicine and the consulting committee of Public Hygiene. The distribution of the serums to the public is the monopoly of pharmacists. The inspectors charged with controlling the sale of these preparations have found that certain pharmacists in Paris have been preparing them without obtaining the proper authorisation, and consequently several have had the unpleasant experience of domiciliary visits from the police. The delinquents have pleaded that they acted in good faith and in ignorance that they were infringing the law, but as they are liable to a fine the maximum of which is 1,000f. (40l.), they will probably await the result of the inquiry that has been set on foot with some uneasiness.

PHARMACEUTICAL CONGRESS AT TOULON.—The Federation of the Pharmaceutical Societies of the South-East of France held its annual meeting recently at Toulon at the Town Hall of the city. Nine departments were represented, including delegates from Corsica. M. Fortuné, President of the Federation, occupied the chair, and in his opening speech insisted on the necessity of French pharmacists uniting to safeguard their interests. A correspondent who was present at the Congress writes me as follows:—"The importance of this meeting was all the greater because three of the societies forming part of the Federation had decided to join the group which has its centre in Paris, and is negotiating with the patent-medicine manufacturers. Formerly the nine societies were unanimous in their opinion that any such negotiations should be opposed. The speciality question was discussed at great length, and it was finally decided unanimously to reject any proposal for coming to an arrangement with manufacturers, the opinion being that such a course would only be a kind of consecration of specialities, while the material benefit resulting from such a course was also not apparent." M. Gamel, of Nîmes, was the newly-elected President of the Federation.

THE SCANDAL AT THE SCHOOL OF MEDICINE, referred to in the *C. & D.* of October 23, was brought to a head last week. A Committee of Discipline, composed of the heads of the various faculties and the Director of the Paris School of Pharmacy, occupied several days in going into the charges brought against Dr. Heim, and found that a part of them were proved. Consequently, while allowing him to remain a member of the Faculty of Medicine, they decided he should no longer be employed in an official capacity. Amongst the delinquencies of the young professor are that of having appropriated to his personal collection a number of valuable plants belonging to the Paris Museum of Natural History. The committee also came to the conclusion that he had been careless in the control of scientific instruments, books, and other objects, concerning the presence of some of which in his own private laboratory he was unable to give a satisfactory explanation. Dr. Heim has declared his intention to appeal against this decision. He admits having been careless in the control of the Natural History laboratory during his temporary term of professorship, and says it can only be prejudice on the part of the Committee of Discipline to attribute worse motives to him. He occupies a good social position, and appears to be well off.

Colonial and Foreign News.

TAXING SODA-WATER.—The authorities of Budapest propose to place a tax of 1 kr. per bottle upon all the soda-water consumed in the city.

SHORTER HOURS on Sunday are wanted by Montreal druggists' assistants. The shops are open nearly the whole day on account of one sinner in the camp.

MR. WALTER DONALD SMITH, senior partner in the firm of W. E. Smith & Co., pharmacists, Madras, is a candidate for the Municipal Board of Bombay. He seeks the suffrages of the sixth division of the city.

PHARMACY IN BULGARIA.—The Bulgarian pharmacists

propose holding a national congress in 1898. It is intended to discuss the question of reforms in the Bulgarian Pharmacy Law and Regulations, and to petition the Parliament of the Principality on the subject.

A BUSINESS CHANGE.—The firm of Lyman, Knox & Co., wholesale druggists, Montreal and Toronto, has been reorganised and the partnership registered. Messrs. Charles Lyman, James W. Knox, Frederick G. Lyman, Wm. Mussel, and George H. Clarkson are the partners.

SUBSTITUTION.—They do substitution on a larger scale in North America than in the old country. It is reported that a Mr. D. B. Comer, of Atlanta, Ga., has succeeded in getting rid of 1,500 gross of "Carter's Little Liver Pills" made by himself, besides piles of other substitutes.

AMERICAN CITRIC ACID.—It is said that a citric-acid factory is to be started in North Ontario, to make the product from the surplus crop of lemons. As the material from which all citric acid used in the United States is made is now imported, the projectors of the scheme believe they can make a profitable thing of it.

ENTANGLED BY TANGLEFOOT.—The O. & W. Thum Company, manufacturers of "Tanglefoot" fly-sticker, recently obtained a restraining injunction against one of their former employés who threatened to impart to others the information he had acquired while in the employ of the company. This decision has been upheld on appeal.

DRUG FAILURE IN ARGENTINA.—The drug-firm of M. J. Navarro & Gietz, at Rosario de Santa Fé, Argentina, has failed. In October, 1896, the firm asked for and obtained a suspension of the payment of its debts for a year. It is said that the prospects of the creditors (mostly German houses) obtaining any appreciable dividend are very small.

"A' STUARTS ARE NO' SIB TO THE KING."—Dr. F. A. Stuart, Chicago, makes medicinal tablets, and when Dr. F. G. Stewart began to do the same, F.A.S. asked the law courts to stop F.G.S. The Court has dismissed the suit on the ground that Dr. Stewart came by his name naturally and made no attempt to pack or label his tablets in a manner imitative of those of Dr. Stuart.

DENTISTS' DIPLOMAS IN CAPE COLONY.—The Cape Colony Medical Council has published a regulation requiring that all dental diplomas, to be registrable in the colony, shall cover a minimum curriculum of three years; and such three years shall comprise either four half-years, or two summer and two winter courses of lectures, or three continuous sessions, in different years, of nine months each; and in all cases a preliminary examination must have been required.

SPONGES.—The sharp advance in sponges, says a correspondent in *Meyer Brothers' Druggist*, is caused by the European demand for American sponges and the high prices the foreign buyers are willing to pay for the goods in order to secure them for their houses—prices which almost prohibit the purchase of the goods by American buyers. As a consequence of the small catches of Cuba grass sponge, large quantities of which are annually exported to Europe, there have been immense takes of Florida grass sponges this season, which are finding larger purchasers abroad.

SULPHUR AND PUMICE FROM NEW ZEALAND.—The *New Zealand Mines Record*, a Government publication, mentions that an export trade in sulphur and pumice has sprung up at Auckland. From January 1 to August 31, 1897, 1,438 tons of sulphur, valued at 3,772l., were exported. New South Wales took 1,088 tons and Queensland the rest. The pumice exported weighed 594 tons, valued at just about 3l. a ton. Thirty tons went to the United Kingdom, 5 tons to Victoria, 559 to New South Wales. All the sulphur was mined at Tikitere, near Rotorua, and the pumice at Rangiriri, Waikato.

THE NEW ZEALAND COMMERCIAL TRAVELLERS' TAX.—The New Zealand Government have announced their intention of abolishing the 50l. poll-tax on commercial travellers, owing to objections taken to it in Australia and the Mother-country. This is a striking illustration of the advantage of pegging away. Even the wholesale merchants in New Zealand did not favour the tax, with the exception of two large soft-goods firms and perhaps a few others. The Government seem to have felt that it was not worth while to incur the imputation of want of liberality for the sake of these few firms,

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

NOT since there were a few militants upon the Council such as Mr. Gwilym Evans and Mr. James Watt, or Dr. Charles Symes in his premier days, have the Council sat so long as they did on Wednesday; and it was all about nothing, or next to nothing, for everything on the agenda was of a routine nature until the Draft Pharmacy Bill was reached. The Council say of it that it is the smallest expressible unit of legislation which they can formulate. It consists of five clauses, and has three objects: first, to make all chemists and druggists eligible for election as members of the Society, therefore, as members of Council; second, to alter the constitution of the Council by abolishing the restriction as to the number of chemists and druggists upon it, and make the retirement of councillors by rotation seven yearly, so that three years would be the minimum term of office; and, third, to make apprentices who join the Society student-associates. The President (Mr. Walter Hills) led off the discussion on the Bill. We report his remarks fully; the rest we condense. Some speakers had to justify their voting for a measure which they had previously opposed and yet have not changed their minds about. Some hinted that it would be a grand thing for the Society to have the whole trade, or the bulk of it, join as members; the more experienced—Mr. Carteighe, for example—speaking from similar moves in 1852 and 1868, had absolutely no hope that anything of the kind would happen. And so the Bill was adopted subject to verbal alterations by the solicitor. The remaining proceedings were brief but important. First came the removal from the register of members of the Society of the names of George Ellinor, of Sheffield, and of Thomas Garratt Forshaw, of Bradford. Then the election of examiners, Mr. E. H. Farr (Uckfield), Professor Harvey-Gibson (Liverpool), Dr. Stanley Kipping, F.R.S. (London), Mr. A. J. Phillips (South Kensington), and Mr. J. E. Saul in place of Messrs. Bascombe, Holmes, and E. White, and Professors Frankland and Green. The Scotch Board was also elected, Mr. James Jack (Arbroath) and Mr. George Lunan (Edinburgh) taking the place of Messrs. Fraser and Sutherland. In connection with the examinations the Council received, through the Privy Council, a long report by Dr. George Marshall, the Government Visitor for Scotland, on the examinations conducted in Edinburgh. This was Dr. Marshall's first report, and it was thorough.

All the members were present except Dr. Symes, who is suffering from a cold. "Order" was called at 11.15, and the Council at once proceeded to business. After the minutes had been disposed of, the PRESIDENT called attention to an enlarged photo group of the British Pharmaceutical Conference, which had been presented in a handsome frame by the Glasgow Committee. "We are much obliged," said the President. The SECRETARY then read a long communication from the Privy Council in reference to

THE BY-LAWS.

It was dated November 17, and recorded, in very precise legal phraseology, that the Lords of the Council had, on November 11, received and approved the amended by-laws referred to by Mr. Hills in his letter of August 4. The lords who so agreed were the Lord President (Duke of Devonshire), Lord Hobhouse, and Sir John Gorst. After a few restorations, the Council came to consider

FINANCE.

The report presented no unusual features. Beginning the month with 172*l.* 8*s.* 7*d.*, the Treasurer received from various

sources 1,684*l.* 8*s.* 2*d.*, and spent 1,554*l.* 6*s.* 7*d.*, so that there remained a balance of 312*l.* 10*s.* 2*d.* to meet fresh demands amounting to 1,794*l.* 6*s.* 5*d.* The Benevolent Fund showed a balance of 754*l.* 0*s.* 8*d.*, the Donation account 279*l.* 3*s.* 4*d.*, and the Orphan Fund 188*l.* 14*s.*, which was in the course of the meeting increased by 35*l.*, interest on 1,000*l.* which the Orphan Fund has lent for investment to the Benevolent Fund.

BENEVOLENCE.

Five applications for relief had been considered by the committee. One was deferred for inquiry, one was refused relief, a third applicant received 13*l.* (5*s.* a week), and two others 12*l.* each. Remarking on the refusal, the VICE-PRESIDENT explained that the applicant had had relief before, but now she has four of her children in orphan asylums. She has recently received a goodly sum of money from another source, and the committee thought that her sons, who are now in the way of doing for themselves, should assist her in keeping her home together.

The Treasurer was authorised to pay at Christmas one quarter's payment to the six annuitants who will be elected next week.

SOME HANBURY LETTERS

have been presented to the Society by Dr. de Vrij, and Mr. SOUTHALL was curious to know what was to be done with them.

The PRESIDENT (who had not yet had an opportunity of reading them) explained that they were the property of the members, and would be made available for reference under certain conditions.

Then came the following

DRAFT PHARMACY ACTS AMENDMENT BILL.

The object of this Bill is to render every person whose name appears on the Register of Chemists and Druggists eligible to become a Member of the Society. "students" of the Society are to become "Student-Associates," and the retirement of one-third of the Council every year is to be decided by rotation instead of by ballot.

(Title) *The Pharmacy Acts Amendment Act, 1898.*

1. In this Act:—

The terms "pharmaceutical chemist" and "chemist and druggist" shall have the same meanings respectively as in the Pharmacy Act, 1852, and the Pharmacy Act, 1868; and "the Society" shall mean the Pharmaceutical Society of Great Britain.

2. Every person who at the time of the passing of this Act shall have duly registered as an "apprentice or student," and who, under the provisions set forth in Section X. of the Pharmacy Act, 1852, has been admitted to and at that time remains in the Society as a "student," shall be registered as a "Student-Associate" of the society; and every person who at the time of the passing of this Act shall have been duly registered, or who thereafter shall become registered as an "apprentice or student," shall be eligible to be elected a "Student-Associate" of the Society according to the Bye-laws thereof.

3. Every person who at the time of the passing of this Act shall have been registered as a chemist and druggist or who shall hereafter become registered as a chemist and druggist shall be eligible to be elected a member of the Society according to the bye-laws thereof.

4. In lieu of the provisions contained in the Royal charter of incorporation of the Society, whereby it is provided that two-thirds of the members of the Council shall in every year go out of office, the following provisions shall, after the passing of this Act, have effect:—

1. On the ordinary day of election of members of the Council in every year seven members of the Council shall go out of office, and the vacancies shall be filled by election, the retiring members being eligible for re-election.

2. The seven members who go out shall be the members of the Council who have been longest in office without re-election.

3. If and whenever the number of the members of the Council who have been longest in office without re-election shall exceed seven, the members of the Council to retire shall be determined by lot.

5. At all meetings of the Pharmaceutical Society, at which votes shall be given for the election of officers, all or any of the votes may be given either personally or by voting-papers, in a form to be defined in the by-laws of the said Society, or a form to the like effect, such voting-papers being received by the Secretary, under cover, not later than 12 o'clock noon on the day on which the election takes place.

6. This Act shall not extend to Ireland.

7. This Act may be cited for all purposes as the Pharmacy Acts Amendment Act, 1898, and shall be construed as one with the Pharmacy Acts, and shall come into operation on the first day of August, one thousand eight hundred and ninety-eight.

8. The enactments mentioned in the schedule to this Act to the extent specified in the third column of that schedule are hereby repealed.

The report of the committee (Law and Parliamentary) was to the effect that they had met on November 2 to consider and discuss a draft prepared by the President. Adjourning until November 30, they again discussed it, and presented it in the above form, subject to any verbal alteration which may be advised by the solicitor, and they recommended that steps should be taken to have it introduced during the coming Session of Parliament.

The PRESIDENT said: I have very great pleasure in moving the adoption of the report, and I have every confidence that you will receive the recommendation with practical unanimity. The committee which sends it forward was large and unanimous. The Bill is a simple one, which will not raise a great amount of enthusiasm, but will, I believe, receive general support. Under present circumstances it is inadvisable to approach Parliament with a contentious Bill—or, rather, I should put it in another way—it is advisable to approach the Legislature with a non-contentious measure. The purpose of the Bill is the consolidation of the Society. In our moral life we speak of faults or sins of commission and faults of omission. So would I speak of the Bill. In this case

THE FAULTS OF COMMISSION

are not great, and will not be criticised unfavourably. The principle of it is to consolidate the Society, and for that purpose all chemists and druggists are made eligible to become members of the Pharmaceutical Society, therefore for election to this Council, and by another clause we propose to remove the restriction upon the number of chemists and druggists who can be elected to the Council hereafter. As far as I can understand the feeling of our adherents, I know few who do not feel that we should do this. We shall in future open the doors wide to all. At present the number of associates is greater than that of members, and as the number of chemists and druggists is increasing in greater proportion than pharmaceutical chemists, it is desirable that the former should be in full accord with our work. (Hear, hear.) That is the first thing that the Bill provides for. The second is as to a new title to give to apprentices or students, whom we propose to call student-associates of the Society. There is a considerable difficulty at present in distinguishing between the students who have passed the Preliminary examination and those who also have done so and have joined the Society. We think the new title will remove this, and in consequence of the new by-laws, which authorise its extension so as to include new subjects—mathematics and French or German—we believe that a better class will come into the trade, and that more of them, attracted by the title "student-associate," will join the Society. The next part on which I have to speak is that dealt with in clause 4, which has been in former draft Bills, and it is one which will receive unanimous approval. It really provides a different mode of election of Council, by doing away with the ballot, and directing that a third of the Council shall retire every year by rotation (Hear, hear.) That is the usual custom in municipal and other bodies. Clause 5 provides for an extension of the time for receiving voting-papers, and it will enable those who do not come to the annual meeting to record their votes up to the last moment. Having said so much in anticipation of criticism of what is in the Bill, I will now say

SOMETHING ABOUT OMISSIONS.

I suppose some of our friends will say, "We have asked you for bread, and you give us a stone." We have been told that we should deal with such topics as jury-service, limited companies, and other matters. We have before us resolutions which have been passed by various bodies; altogether they come from seven bodies, and six agree with the principle of making chemists and druggists eligible for the membership. Other points were discussed at the meetings, and received a varied amount of support. I will deal with all these matters, although my words are of poor comfort. Still, I ought to say that many of these grievances which affect our brethren in the country also affect us. (Hear, hear.) We feel them, and are touched by them, and I am sure that this Council and every member of it are in great sympathy with many of these opinions. It has been suggested that a period of three years should elapse between registration as a student and entering for the qualifying examination. We are all in favour of it, but there were certain difficulties in the way of legislating upon it, and a certain amount of opposition would be brought against the Bill if it was put into it. I am inclined to think that this result will be brought about by the new by-laws. The future Preliminary examination will have to be passed during school-life, or soon after. That will take lads to 16 or 17 before entering on apprenticeship, so that by the time they are eligible for the Minor at 21, at least three years will have elapsed during which they will be engaged on the Minor subjects. But this is also part of a larger scheme—the curriculum. I am entirely in favour of some sort of one, and in one or two draft Bills the principle has been advocated; but I am bound to say that the curriculum scheme, though bound to come in a few years, is not ripe to be dealt with. In a few years there will be a change in the views of the members; systematic training of apprentices will get a great deal of attention, and then we shall be more prepared to act. With reference to the conference on provincial education which has been suggested, and of which I, as President of the Pharmaceutical Society, have been mentioned as chairman, this is a matter in which I have great personal interest, but I would ask friends: Don't hasten on matters too quickly, but work cautiously, so that the results may be good. As to division of examination, I am also in sympathy, but I am utterly opposed to intermediate qualification distinct from [the Minor] examination; but I would do everything to encourage students to work all along. As to jury-service, it is quite impossible to deal with that in a Pharmacy Bill, unless in an indirect way. The only way of getting out of it is to suggest that they should become pharmaceutical chemists. Although I am open to accept chemists and druggists as members of the Pharmaceutical Society, I am not prepared to admit all those who have passed the Minor as pharmaceutical chemists, and if we were to do so in the Bill, we should raise a large amount of opposition from those who are pharmaceutical chemists at the present time; but I am quite prepared to raise the Minor to give the title "pharmaceutical chemist" and to institute another examination for a higher title. That principle I expressed a few years ago, but on the distinct understanding that a system of education would accompany it. As to the privilege of dispensing physicians' prescriptions being reserved to chemists and druggists, that we all agree to, and the principle was put in a Bill a few years ago, but there was not much enthusiasm about it, and if we were to put it in now we should raise opposition. As to limited companies, the more one thinks of that subject the more one feels how difficult it is to tackle it. As one goes round the streets and sees how extensively the principle of limited liability is being applied to trade, and the businesses which are so converted, and remembers how many branch shops there are owned by our own people, one feels how difficult a subject this is to tackle. One has also to remember that large vested interests are now included and increasing in this section of trade, and all concerned with these interests we should awake by dealing with this subject. When one sees also that the title "Pharmaceutical Chemist" is not so much appreciated as "Drug-stores," and that our own people are doing it, one must conclude that it is a very thorny question. I would also point out that we have no

resolution in regard to it from associations. I think I am right in that ("Yes.") Although we hear of it from individuals (some of the gentlemen who have written about the local secretaryships have mentioned it), we have no resolutions from associations, for when men come together to consider the question they find that the remedy would be worse than the disease. I think so. (Hear, hear, and laughter.) Well, then, what we propose to do is to give full representation on the Council to all interests, and I hope we shall have the hearty support of our friends in the country. In order to carry a Bill like this we not only require no organised opposition, but pressure behind. I must ask our friends to put themselves in communication with their representatives so that members of Parliament will see that it is to their interests to promote it. What interest can they have in it unless some of their constituents call their attention to it? I therefore hope that all country members will give us backing in that direction. (Applause.)

OTHER SPEECHES.

The VICE-PRESIDENT (Mr. Newsholme) remarked that the President had said that there might not be much enthusiasm about the Bill, and to that he would add that the enthusiasm should come from those who had passed the Minor examination, who were to benefit by it. He was strongly of opinion that if chemists throughout the country were to interview their M.P.'s they would soon see what a power they were in the land. It was not the Society adherents who would lack in enthusiasm for the measure, but outsiders, those men who were always asking what the Society had done, and who would now say about the Bill, "Do this, and we shall come in." Was that fair? Was it English? He was quite sure that they would get all they wanted if chemists would only join them. The Vice-President also took the President's references to the Preliminary as a text for a little sermon on the iniquity of taking as apprentices persons who have not passed or are not preparing to pass the examination, and he urged upon local associations to support the Bill.

The TREASURER (Mr. Hampson) said he had been sufficiently long on the Council—at least twenty-five years—to remember all previous attempts to amend the 1868 Act. Although the Bills were lost in the Parliamentary waters, they had been under the eye of the trade, and the wrecking of the measures was not due to want of enthusiasm, but to opposition. That justified them in going forward with a Bill which invited no opposition. He thought the first step should be taken before they asked for more; and he appealed to the trade to give the Bill their support, or, if not, that they should hold their tongues about it.

Mr. WARREN, as one who some years ago was opposed to the principle of admitting chemists and druggists to membership, now gave his adhesion to it because pharmacy is coming more and more into the hands of chemists and druggists. He said any opposition to the Bill could only come from those who sulk in their tents, and mentioned that associations do not demand of the Council impossible things.

"We are going on safe lines," said Mr. HARRISON. "We have learnt something from the past. Large Bills did not create enthusiasm, so we now take two steps to what we in our enthusiasm would have taken in one. A large number of our Associates do feel it a grievance that they can't become full members, and this should satisfy them." The rest was about bread and stone, ploughing the sands, and a "can't help thinking that if trouble is taken the Bill will become law."

Mr. S. R. ATKINS felt it would be a very serious mistake if the Bill went forward without the full support of the Council, from whom the momentum in pushing it should come. The simplicity of the Bill was its special merit. He did not think there was a ghost of a chance of a contentious Bill getting through, and discussing the question, Where can opposition possibly come from? suggested to the Council that if opposition came he would say, "Mine enemy hath done this." But there could not be a man in this country who is opposed to the Bill, for there was no enemy to the Society in this country. (Laughter.) After saying that company-pharmacy was a great grievance felt, if not expressed, Mr. Atkins concluded by remarking,

"Whether the Bill will accomplish the object we have in view [bringing all chemists into the Society], I don't know."

Mr. STORREAR said he had previously spoken against a simple Bill for two reasons—first, because there was a tendency to decrease in the number who go forward to the Major, and so lower the qualifications which entitled them to respect as a scientific body; and second, because it was an injustice to those who had already qualified. Still, the principle of opening the doors of the Society widely to all was so generally approved that it was useless for him opposing it. It was not the Council's or the Society's fault that the Bill was so small, but the fault of outsiders, who had on former occasions failed to support larger measures. The Council showed by this Bill that they desired to embrace the whole trade, and if the trade failed to take advantage of that it was not the Council's fault.

Mr. J. RYMER YOUNG supported the Bill, although he remarked immediately after that chemists and druggists had never taken advantage of the privilege they now have of returning seven members of Council. Never more than three had been on it. If the Bill passed it would strengthen the Society, but he was not sanguine that it would increase it. A more radical Bill could not be conceived, for it would be possible under it to utterly extinguish the present Council. (Laughter.)

Mr. MARTINDALE emphasised the importance of not giving Minor men the title "Pharmaceutical Chemist," because the public were not so familiar with it as "Chemist and Druggist," and it was imperative that they should keep up the supply of those who retailed drugs and poisons, and who did not claim to have the high qualification required in association with physicians. They must not make the mistake that had been made in Ireland.

Mr. CARTEIGHE appealed to Major men to receive the Bill as they had received the one which became the Pharmacy Act of 1868. When he was President he had gone round the country with such a Bill as this, only it had a curriculum tacked on to it, and then there was no opposition. He saw no reason why this one should not go in the same way. Having referred to some points in the Bill, Mr. Carteighe mentioned that although the 1852 Act allowed all chemists and druggists in business to become pharmaceutical chemists, they did not come in; nor did the same class become members of the Society when the 1868 Act permitted it. Further, there was a clause in the 1867 draft Bill permitting all who qualified as chemists and druggists to be members of the Society, but owing to the opposition of Major men that had to be abandoned. He was George Webb Sandford's lieutenant then, and proposed the amendment, but Mr. Sandford was the only one who held up his hand in favour of it, although he told him afterwards, "You're wrong in this, Carteighe. The time will come when you will have to admit these men as members." Mr. Carteighe also referred to how they at that time had met the United Society of Chemists and Druggists—not through correspondence or the help of editors, but they met them and convinced them. He concluded by again appealing to pharmaceutical chemist members of the Society to support the Bill, reminding them that their higher education remained, by which they had advantage in pharmacy; and he supported Mr. Martindale's argument as to the bad policy of one qualification only.

Mr. BOTTLE, as the oldest member of the Council, endorsed the appeal made by Mr. Carteighe.

The PRESIDENT, summing up, said that he had a letter from Dr. Symes supporting the Bill, and mentioned that favourable resolutions had been received from six provincial Associations.

The Bill was adopted unanimously.

REMOVALS FROM THE REGISTER.

Under Section xvii. of the by-laws, the Council resolved to remove George Ellinor, of Sheffield, and Thomas Garratt Forshaw, of Bradford, from the membership of the Society.

PRELIMINARY EXAMINATION.

The following were appointed superintendents and deputy-superintendents of written examinations at the centres named.

Centre	Superintendent	Deputy
Aberdeen ...	Strachan, Alexander	Cruickshank, John
Birmingham ...	Thompson, Charles ...	Prosser, Frank H.
Brighton ...	Gwatkin, James Ross	Savage, William W.
Bristol ...	Keen, Benjamin ...	Allen, Benjamin
Cambridge ...	Deck, Arthur ...	Coulson, Horace
Canterbury ...	Bing, Edwin	Amos, Daniel
Cardiff ...	Munday, John ...	Coleman, Alfred
Cardisle ...	Hallaway, John ...	Pattinson, Michael H.
Carmarthen ...	Lloyd, Walter ...	Phillips, George
Carnarvon ...	Jones, John ...	Jones, David
Cheltenham ...	Barron, William ...	Palmer, Frank T.
Darlington ...	Robinson, James ...	Hutchinson, Rev.
Douglas (I.M.) ...	Radeliffe, John C.	Young, John
Dundee ...	Kerr, Charles ...	Hardie, James M.
Edinburgh ...	Stephenson, John B.	Henry, Claude F.
Exeter ...	Lake, John Hinton...	Milton, Thomas C.
Glasgow ...	Corrie, William L. ...	Moir, James
Guernsey ...	Nickolls, J. Bate ...	De la Rue, F. H.
Hull ...	Bell, Charles Bains...	Stoakes, Benjamin M.
Inverness ...	Allan, Alexander ...	Ogston, William
Jersey... ..	Cole, George... ..	Baker, John Thos.
Kirkwall ...	Stewart, Duncan ...	Webster, Rev. D.
Lancaster ...	Vince, James... ..	Arkle, William
Leeds ...	Reynolds, Richard ...	Branson, Fredk. Wm.
Lincoln ...	Birkbeck, John Thos.	Elmitt, George
Liverpool ...	Smith, John ...	Buck, Anthony S.
London ...	Taylor, George Spratt	Allen, Charles B.
Manchester ...	Kemp, Harry... ..	Moon, Harry
Newcastle-on-T.	Clague, T. Maltby ...	Swin, Charles
Northampton...	Bingley, John ...	Owen, Alfred E.
Norwich ...	Sutton, Francis ...	Mayger, Wm. David
Nottingham ...	Bolton, Charles A. ...	Corder, Octavius
Oxford... ..	Prior, George T. ...	Sergeant, F. Ross
Penzance ...	Symons, Netherton H.	Thurland, Hy.
Peterborough ...	Heanley, Marshall ...	Buckett, A. H.
Plymouth ...	Hunt, Freeman W. ...	Saunders, James E.
Sheffield ...	Ward, William ...	Woods, Wm. H.
Shrewsbury ...	Cross, William Gowen	Squire, George
Southampton ...	Dawson, Oliver R. ...	Blunt, Thomas P.
York ...	Sowray, Joseph ...	Wilson, Harry
		Kendall, Edward B.

EXAMINERS.

The following gentlemen were appointed as members of the Board of Examiners for England and Wales:—W. Arkinstall, E. H. Farr, Professor Harvey Gibson, Professor F. S. Kipping, E. W. Lucas, Professor H. McLeod, A. J. Phillips, J. E. Saul, G. S. Taylor, A. E. Tanner, and Robert Wright.

For Scotland the gentlemen nominated by the North British Branch Executive (see page 867) were elected.

Thanks were voted to the examiners for their services this year.

A report on the

EDINBURGH EXAMINATIONS

by Dr. Balfour Marshall, the Government Visitor, was received from the Privy Council. It covered the present year, and was lengthy. Dr. Marshall attended on fourteen occasions, and he submitted the following results:—

Major Examination.

	Number	Percentage
Candidates examined ...	10	—
„ who passed... ..	1	10
„ „ failed ...	9	90
The practical work was accountable for 5 rejections		
Botany for ...	7	„
Chemistry for ...	5	„
Physics for ...	2	„
Materia medica ...	7	„

One candidate passed in each subject, but failed in the aggregate. The Visitor regretted that so few candidates presented themselves for this examination, and made reference to the very high percentage of failures, especially in botany and materia medica. This is attributed to imperfect training, the students having depended upon books and “coach” classes only, instead of attending a recognised school of pharmacy.

Minor Examination.

	Number	Percentage
Candidates examined... ..	578	—
„ who passed ...	191	33.04
„ „ failed ...	387	66.96

The number who failed in the practical subjects was 248, or 42.9 per cent.; of these 136 obtained no marks in pharmacy and dispensing. Dr. Marshall considers this not creditable to the candidates. Only 330 out of 578, or 57.1 per cent., were admitted to further examination, and of this number 139 were rejected, botany being accountable for 62 failures, chemistry for 34, and materia medica, pharmacy, or prescription-reading for 16. He says botany and chemistry are the two subjects of which a candidate requires to have a special knowledge, as the others practically form part of the pharmacist's daily work. The report proceeded: “The examination in chemistry is of necessity searching, as it forms the groundwork of pharmacy, and, although not too severe, yet it accounts for nearly one-half of the total failures. Although the failures in prescription-reading are few, yet far too many of the candidates showed great want of knowledge of their Latin grammar, which suggests a defect in the Preliminary examination. They translated English directions into Latin with difficulty, and were frequently ignorant of the names for the higher numerals.

“The very high proportion of rejections distinctly shows that there is a lack of proper training, especially in laboratory-work. It is not sufficient merely to recommend the students to attend a certain number of lectures, and I believe the only remedy is to have a regular curriculum. This would ensure compulsory attendance on lectures and a systematic laboratory training, both in chemistry and pharmacy. There may be financial difficulties in the Pharmaceutical Society establishing schools of their own in the provinces, but these can be largely overcome. There are already medical schools established in most of the large centres, with excellent teachers in the subjects required for the pharmaceutical examinations. Arrangements could be made with teachers in their medical schools to hold special classes in the morning, and if a curriculum were made compulsory pharmacists could let their apprentices attend, as the forenoon hours are the most suitable.

“Many students who attend coach classes and other at present unrecognised pharmaceutical schools do so late in the evening when they are already exhausted with their day's work and not in a mental condition to assimilate such knowledge as is imparted to them. Moreover, a thorough laboratory training is essential, and the neglect of this results in a large number of failures in the practical examinations.

“It is worthy of note that candidates even show a want of knowledge of such physical instruments as the thermometer, the barometer, the chemical balance, and the microscope. This is undoubtedly the result of mere cramming taking the place of careful systematic training. In conclusion, I am able to express my entire satisfaction with the manner in which the examiners perform their duties.”

The PRESIDENT and Mr. CARTEIGHE remarked upon the valuable nature of the report.

NORTH BRITISH BRANCH.

DINNER.

THE annual dinner of the Branch was held in the Royal Hotel, Edinburgh, on Thursday evening, November 24. Mr. J. Laidlaw Ewing, Chairman of the Branch, presided, Mr. W. L. Currie (Glasgow), was Vice-Chairman, and Mr. J. Bowman, President of the Edinburgh and District Chemists' Trade Association, acted as croupiers. Between sixty and seventy gentlemen were present, among them Dr. P. A. Young (Treasurer of the Royal College of Physicians), Mr. Amore (President of the Odonto-Chirurgical Society), Dr. Kennedy, Dr. E. Price, Dr. Leonard Dobbin, Dr. Butchart, Mr. P. Morison, S.S.C. (the Solicitor for the North British Branch), Mr. H. B. Ezard (Secretary of the Odonto-Chirurgical Society), Mr. G. Sinclair (President of the Edinburgh Chemists' Assistants' Association), Mr. D. Storrar (Kirkcaldy), Mr. J. Johnston (Aberdeen), Mr. Nesbit (Portobello), Mr. W. R. Kermath (St. Andrews), Mr. C. Kerr (Dundee), Mr. A. McKellar, Mr. M. Adam, Mr. J. Anderson Russell, Mr. J. W. Sutherland, Mr. J. Moir and Mr. T. McKenzie (Glasgow). Mr. T. Maben (Hawick), Mr. J. H. Fisher (Dunfermline), Mr. A. Davidson (Montrose), Mr. D. Mitchell (Inverness), and Mr. W. B. Cowie. Mr. J. Rutherford Hill (Assistant Secretary) intimated apologies for absence from the President of the Royal College of Physicians, Professor Bayley Balfour,

Professor Gibson (Edinburgh), Professor Walker (Dundee), Mr. J. R. Young, Mr. Robert Dick, Mr. J. B. Stephenson, and others.

The dinner and loyal toasts disposed of, Mr. J. ANDERSON RUSSELL gave "The Pharmaceutical Society of Great Britain." It was, he said, difficult for them to picture to themselves what this country was like prior to the inauguration of the Pharmaceutical Society, but they had a vague idea that the dispensing and distribution of medicines were in the hands of a class, many of whom might be well up in the particular branch which had fallen to their lot in life, but who, for the most part, were very far behind in their knowledge in regard to the particular things they were handling. Outsiders might ask, Who were the men, and what had the Society done? They had only to carry themselves back to between fifty and sixty years ago and compare the way in which medicines were dealt with at that and the present time and say, "There is the work of the Society." It was a voluntary body banded together for their own advantage, but also prominently for the advantage of the community amongst whom they laboured. The purposes for which it was designed had been drawn up by very far-seeing men, for even at this day they recognised that the purposes stated by them were still matters of everyday interest. The Society had sought constantly to advance with the times in its examinations and in the grade of education it promoted. (Applause.) Referring to the recognition of associates in business as members of the Society, he thought it would be well if it would go a little further in another line and curtail something in the practice of pharmacy so that they would not have to contend against so much knavery. He hoped it would form a rallying-point through which members of the pharmaceutical world would band themselves together and work hand-in-hand focussing their energies upon London as the centre, so that there would be less of the feeling amongst members and associates that the Society was something away up in London and that they had nothing of it there.

Mr. D. STORRAE, in reply, said they all agreed with Mr. Russell when he said the Society was year by year growing in status and influence and in the recognition it received from other scientific societies. Government had devolved upon it very important duties, which were, he believed, carried out faithfully and well. They regretted that their Society did not receive that support which it deserved from the trade generally. It was perfectly absurd to see people who remained outside attempting to clog the wheels of their coach. The wheels would go round in spite of them, and surely the most sensible thing was to get on board the coach and try and control the driver. (Applause.) It was only by making a united front that they could hope or attempt to get anything from Parliament. They were all agreed that they should either have more legislation or free trade in drugs, and that, with regard to the recent interpretation of the Pharmacy Acts, they had squeezed out of them all that was originally intended by them, and that what was left in them was very little safety to the public, and still less benefit to pharmacy. (Hear, hear.) Personally, he could not say they would gain much by legislation. He did not believe they need look or hope for protection to their calling from Parliament. He did not believe they would get or need ask Parliament to put down store-dispensing or legitimate company-dispensing. It was quite possible they might be able to put down bogus or one-man companies, organised to defeat the law—not to give justice to pharmacists, but because those companies damaged other businesses as well as theirs, and affected the public interest. What, then, were they to ask? He thought, in the Society and out of it, they had been discussing details too much of late, but they were now trying to agree upon and to formulate a general policy in order to get it by degrees if they could not get it all at once. They ought to try to get the dispensing of all drugs confined to qualified men. (Hear, hear.) Certainly they ought to get, if it was any advantage, the dispensing of scheduled poisons strictly confined to qualified men. They ought to go back to the first Pharmacy Bill, and have it re-enacted that the man who formed a company and kept open shop was the seller in the eye of the law—(applause)—and should be held accountable for the actions done in his shop or place of business

And, lastly, although it was not a very popular thing, he thought if store and company dispensing was to be carried on, these companies should be made to give the names of their qualified men—(hear, hear)—and that the qualified man's name ought to be the name on the labels. He did not believe legislation of any kind would do much good. The hope of the future was increased education, and increased fitness for their calling. The only alternative to that, so far as he could learn, was a policy of protection, either by the State or by some such society as the P.A.T.A. (A VOICE: "Oh!") Protection by the State was very desirable, if they could get it. Protection by the other was a matter of opinion. With reference to Mr. Russell's remarks regarding the Council, he said they were a select body with very good business ability—a little patriarchal—(laughter)—and, perhaps, rather conservative. But he believed they were sincerely anxious for the welfare of the whole body of pharmacists. It might be better if the rule recently applied to examiners were applied to the Council, and that there should be compulsory retirement now and again. He quite approved of it in theory, but he did not know exactly where it should begin. It would be a very great loss to ask Mr. Bottle or Mr. Carteghe to retire, and he would rather they began with Mr. Johnston than himself. (Laughter.)

"The Licensing Bodies" was next submitted by Mr. T. MABEN, the toast referring, not to benches of magistrates, but chiefly to the Royal Colleges of Physicians and Surgeons of Edinburgh; and Dr. P. A. Young and Mr. Amore were called upon to respond. In the course of his reply, Dr. YOUNG mentioned the new Pharmacopœia, saying that pharmacy had made so many strides in the last ten or fifteen years that the whole complexion of their Pharmacopœia would have to be changed. He also referred to the old connection between his college and pharmacists, and, speaking of Martius's collection, which has been presented to the Branch, said that it was purchased at the request of Sir Robert Christison. Dr. Young also alluded to the excellent quality of the drugs generally dispensed by pharmacists in Edinburgh, and to the satisfactory relations which existed between medical men and chemists, and the respect each paid to the other's business.

Mr. AMORE returned thanks also.

Mr. PETER BOA gave "The North British Branch and the Board of Examiners." He spoke of his long connection with the Pharmaceutical Society, and the good will he had towards it. He thought, perhaps, it was well he got his fees paid before they had advanced to ten guineas, otherwise he might have been tempted to make a personal application of the joke which had been made in connection with the journalistic expenditure of the Society to the effect that this pre-savoured somewhat of robbing Peter to pay Paul. (Laughter.) His good will to the Society extended also to the North British Branch. It was the fashion at present to speak of the members of their trade and their business as pharmacists and pharmacy. It used to be druggists and the drug-business. He did not know that the public had altogether become educated as to the proper application of these terms. In illustration of his remark he related an incident which occurred in the Grand Hotel, Glasgow, towards the end of the meeting of the Pharmaceutical Conference in August last, when an agriculturist from the North of Scotland thought that the members of the Conference had come to start a branch of the Royal Agricultural Society in opposition to the Highland and Agricultural Society of Scotland. (Laughter.)

Mr. CURRIE, in reply, speaking of the Executive, said that if they had the power, as they had the will, to settle matters in relation to the conduct of trade, they would do it to the satisfaction of the members. It was a pity they had not that power, and he thought some measure of home rule should be carried out in regard to matters pharmaceutical. He also replied on behalf of the Board of Examiners.

Other toasts were "The Chairman," proposed by Mr. C. KERR (Dundee); "The Assistant Secretary," by Mr. P. MORISON, S.S.C.; and "The Croupiers," by Mr. GEORGE LUNAN. A number of songs were sung by members of the company during the evening.

EXECUTIVE MEETING.

A MEETING of the Executive of the Branch was held in the Society's house, 36 York Place, on Friday forenoon. Mr. J. Laidlaw Ewing presided.

GENERAL PURPOSES COMMITTEE.

The ASSISTANT SECRETARY read the report of the General Purposes Committee, from which it appeared that the contract for fitting up the new library had been completed to the satisfaction of the committee. The committee had accepted a tender for introducing the electric light into the Society's house and supplying an installation in the new library at a cost of 27*l.* 10*s.* This also had been completed to the satisfaction of the committee. The Chairman, Professor Gibson, and Mr. Coull had been appointed a committee to devise and have carried out a plan for the more efficient ventilation of the examination-hall and laboratories by means of an exhaust-fan and electric motor. The Royal College of Physicians had transferred to the Society their centre-floor museum-case.

The CHAIRMAN remarked on the splendid character of the gift they had received from the College, and at his suggestion special thanks was voted to the College.

NOMINATION OF EXAMINERS.

The Executive then went into committee to consider the nomination of examiners for 1898. On resuming,

Mr. MCADAM (Glasgow) moved—

That the following gentlemen, viz.:—Isaac Bayley Balfour, Professor of Botany in the University of Edinburgh; John Gibson, Professor of Chemistry, Heriot Watt College, Edinburgh; Alex. Davidson, Montrose; J. L. Ewing, Edinburgh; Jas. Jack, Arbroath; George Lunan, Edinburgh; and John Nesbit, Portobello—be nominated for election by the Council as members of the Board of Examiners for Scotland for the year 1898.

Mr. J. JOHNSTON (Aberdeen) seconded.

Mr. J. ANDERSON RUSSELL said he wished to record his dissent.

The CHAIRMAN said he could not do so without moving an amendment.

Mr. RUSSELL said he would do so to put himself in order. He moved that they do not approve of the names of the two gentlemen who were at present on the Executive.

The CHAIRMAN: How about the power?

Mr. RUSSELL: It is not that we have no power, but that it is inadvisable.

The CHAIRMAN said the Executive had no power to elect—they could only nominate—and he was inclined to rule that these by-laws had no bearing on the Executive.

Mr. RUSSELL said the Chairman was assuming something in regard to his opinions which was not at all correct. He was not saying the by-laws had any bearing on their conduct, but he was putting himself in order. He took it that the Executive had power to nominate to the Council in London persons whom they thought advisable to be appointed examiners.

The CHAIRMAN asked if Mr. Russell was to submit names in place of those nominated. If this was to bring up a question of principle, he would rule it out of order, and he did so now.

Mr. RUSSELL said he submitted to the Chairman's ruling, and, there being no amendment, Mr. McAdam's motion was carried.

Mr. LUNAN and the CHAIRMAN returned thanks.

THE NOMINATION OF LOCAL SECRETARIES.

The ASSISTANT SECRETARY said he had had some correspondence with Mr. Bremridge regarding the appointment of local secretaries in Scotland. It would be observed that in the list published no Scotch centre seemed to have been behind on the matter of nomination. This might be misleading, because, as a matter of fact, at least twenty centres in Scotland had not sent in a nomination at the proper time, but by correspondence he had succeeded in completing the list before the Council meeting. The Assistant Secretary said that, after consulting with the Chairman, it had been considered desirable to bring the matter before the Executive, so that the attention of pharmacists throughout Scotland might be drawn to the subject, and that the Executive might consider any means that could be devised for creating greater interest in the subject.

Mr. CURRIE held that the time given for calling a meeting and returning a nomination—something like six days—was too short. He had been in conversation with Mr. Newsholme

on the matter, and he was likely to take it up. The annual election of a local secretary was a piece of absurdity and expense. He thought the appointment should be for a triennial or quinquennial period.

Mr. KERR thought the local secretary should be elected for two or three years, and that he should then have to retire.

It was agreed to remit the question to the General Purposes Committee to report at next Executive meeting.

THE LAST CONFERENCE.

The CHAIRMAN moved a vote of thanks to the local committee of the British Pharmaceutical Conference at Glasgow for their hospitality, and spoke of the success that had attended the proceedings.

This being agreed to,

Mr. MCADAM, convener of the local committee, returned thanks, and presented to the Executive an enlarged copy of the photographic group taken at the Conference excursion at Arrochar.

The CHAIRMAN accepted the picture with thanks.

THE CONDUCT OF EXECUTIVE BUSINESS.

Mr. RUSSELL asked what were the rules which controlled the business of the Executive?

The CHAIRMAN referred Mr. Russell to the resolution of the Council, printed in the Society's Calendar, constituting the Executive and defining its powers and functions.

Mr. RUSSELL said that resolution contained no suggestions or instructions as to the mode in which their business should be conducted. He submitted that it was most difficult for old, as well as young, members of the Executive to be satisfied in their own minds as to the course to be taken in putting forward any matter of business, and he moved that a committee be appointed to draft a set of rules for the conduct of their business.

Mr. McLAREN seconded, and, after some discussion, this was agreed to.

NOTICE OF MOTION.

Mr. C. F. HENRY gave notice of a motion for the next meeting—

That, in the opinion of this Executive, steps should be taken to prevent limited liability companies using and exhibiting the title "chemist," or "druggist," or "chemist and druggist," and that the attention of the Council be called to the increasing use made of such titles by such companies, with the view of their taking action in the matter.

This was all the important business.

OPENING OF THE SESSION.

THE winter session was opened on Friday evening November 26, at 36 York Place, Edinburgh, by Professor James Walker, D.Sc., Ph.D., &c., University College, Dundee who delivered an address. Mr. J. Laidlaw Ewing presided and there was a large attendance of members, associates and assistants.

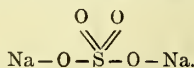
The CHAIRMAN, in introducing Professor Walker, said they had been most fortunate in securing such a distinguished chemist to open the session, and he was sure they would give him a very cordial welcome. (Applause.)

Professor WALKER chose for the subject of his address—

THE NEW DUALISM IN CHEMISTRY.

There are probably some present, he said, who, if they recall their first instruction in chemistry, will remember that they were told that salts were composed of a basic oxide combined with an acidic oxide; that sodium sulphate, for example, was composed of sodium oxide Na_2O , with sulphur trioxide SO_3 , and had the formula $\text{Na}_2\text{O} \cdot \text{SO}_3$. This dualistic mode of representing compounds had in many instances conspicuous advantages, especially in the formulation of salts containing oxygen, and in general in all cases of oxidation and reduction. However, when the idea of atom-linking found general acceptance, this old method of representation was gradually given up, for it no longer had any obvious connection with the now prevalent theories of the ultimate constitution of chemical compounds. The atoms, according

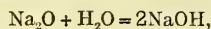
to the new theory, were all linked together to form a sort of chain, and the formula of sodium sulphate was written—



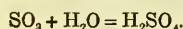
If this conception of the constitution of the molecule is correct, it is evident that there is no justification for dividing the oxygen of a salt into basic oxygen and acid oxygen, as was formerly done. The notion of the direct linking of atoms to form atomic chains dominates chemical theory to the present day, and the old dualistic mode of formulating compounds has practically vanished, persisting only in such common names as "sulphate of soda," which recall the old division of the salt into the basic oxide "soda," and the acid oxide "sulphuric acid." But within the last ten years a new dualism has sprung up, and it is my object to-night to give an account of this theory, and to show its practical applications in the understanding and teaching of elementary chemistry.

WHAT THE NEW DUALISM IS.

In the language of the old dualism a salt consisted of an electro-positive part and an electro-negative part—the sodium oxide and the sulphuric anhydride of our example. These parts were supposed to hold together because it was generally known that in electrical phenomena opposites attract, and like repels like. There was also direct practical justification for this view. When a solution of sodium sulphate is electrolysed, it is found that round the negative pole caustic soda accumulates, and round the positive pole sulphuric acid. Here the salt has been split up into a basic or positive portion, which wandered to the negative pole, and an acid or electro-negative portion, which travelled to the positive pole. The caustic soda was supposed to be formed by the union of the basic oxide with water, thus—

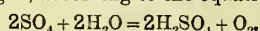


and the sulphuric acid by the combination of the anhydride with water, thus—



If we consider this and similar cases of electrolysis, therefore, the old electro-chemical dualism seems to give a reasonable explanation of the facts; and in other instances, where the explanation has been less simple, it is still possible to apply the theory successfully and consistently.

It was precisely to account for the phenomena occurring in cases of electrolysis like the foregoing that the new chemical dualism was devised; and in the first instance it was not intended to have any direct bearing on chemical theory at all. According to it, sodium sulphate, when dissolved in water, splits up into an electro-positive portion and an electro-negative portion, but these are no longer supposed to be the basic oxide and the acid oxide, but the basic radical and the acid radical. Sodium atoms or ions constitute the positive part; the sulphate radicals, or the "sulphions," constitute the negative part in our example. Faraday gave the name "ion" to the carriers of electricity which move in a solution undergoing electrolysis. Electricity in an electrolyte can only move along with matter, as may easily be shown by the changes in concentration which occur around the electrodes, and not as in metallic conductors, where it moves without a material carrier. These different modes of movement of the electricity have been compared to water being carried in pails and water flowing through a pipe. When the ion carrying the electricity arrives at the electrode, it is there discharged, and may then either be liberated, as is the case with many metallic ions, or it may react with the water of the solvent, as also frequently happens. In our example the sodium ions, when they arrive at the negative electrode, lose their charge of electricity, and at once act on the water with formation of caustic soda and evolution of hydrogen. At the positive electrode the sulphions are discharged, and decompose the water with formation of sulphuric acid and evolution of oxygen, according to the equation—



Although physicists had long been familiar with this conception of the ion, they did not conceive it to have an independent existence in the electrolytic solution. It is true that the positive ion was supposed to carry the

positive electricity and the negative ion to carry the negative electricity, but the transference of the electricity to one pole from the neighbourhood of the other was assumed to be made by the different sodium sulphate molecules exchanging ions, so that by a sort of "ladies' chain" process, in which the ions constantly changed partners, two streams of ions steadily arrived at the opposite electrodes without any one ion having been for an appreciable time unpaired with an ion of the opposite sort.

ARRHENIUS'S CONCEPTION.

The essential novelty of a salt in the state of aqueous solution introduced by Arrhenius, the originator of the new dualism, is that the ions are supposed for the most part to exist altogether free of each other, and to act independently, not only in electrolytic but also in chemical processes. Common salt is conceived by him to exist at all times in aqueous solution not as molecular NaCl, but as independent ions—Na with a charge of positive electricity, and Cl with a charge of negative electricity. At first sight this seems to be directly at variance with our ordinary experience of the properties of sodium and chlorine. Metallic sodium when brought into contact with water at once decomposes it with evolution of hydrogen; chlorine we know as a greenish yellow gas giving a yellowish aqueous solution. We must recollect, however, that Arrhenius does not state that ordinary sodium exists in solution; it is sodium highly charged with electricity, according to Faraday's law, that maintains an independent existence in the water. Now we know that an electrical charge often profoundly modifies the chemical properties of a substance. Aluminium does not attack water under the ordinary condition, neither does mercury; but let aluminium be covered with a fine film of mercury so as to form aluminium amalgam, and it at once acts on water even at the ordinary temperature, with evolution of hydrogen. A piece of sodium when in contact with certain other metals may be thrown into strong sulphuric acid without any violent action occurring. The electric charges assumed by metals when brought into contact with each other thus entirely change their chemical properties. Bearing this fact in mind, then there is no inherent improbability of sodium and chlorine existing in a solution of common salt in the state of ions, so far as the interaction between them and the solvent is concerned. We are still, however, so much accustomed to look at the sodium and chlorine as being firmly bound together even in solution that the conception of their leading an independent existence is strange and even abhorrent. But if we recollect that it is precisely salts in solution that we most often use for rapid chemical reactions, we must admit that their radicals are very freely interchangeable and therefore but loosely bound together, if bound together at all. A comparison of the sluggish actions of organic chemistry with the easy interaction of aqueous solutions of acids, salts, and bases will serve to illustrate this difference, the organic substances not being as a rule split up into positive and negative ions. The practical test to find out whether a substance is decomposed into ions or not in a solution is in all cases an observation of its electrical conductivity. If the solution of the substance conducts well, there must be many carriers of electricity in it—i.e., the dissolved substance must be to a considerable extent decomposed into ions. If the solution conducts feebly or not at all, we draw the conclusion that there are only a few ions present. As I have said, the extent to which a substance is decomposed into its ions is not only a measure of its conductivity, or *vice versa*, but also of its chemical activity. Contrast, for instance, the immediate action of alcoholic solutions of the metallic chlorides (which are all good conductors) on the solution of a silver salt, with the behaviour of the solutions of the non-conducting so-called organic chlorides, say phenyl chloride. In general we find chemical activity in the sense of readiness to undergo double decomposition to go hand in hand with electrical conductivity, and the explanation given by Arrhenius is that the real carriers of the electricity are the free ions, which in virtue of their freedom are chemically active, since they have not to be separated from each other before they interact.

APPLICATIONS OF THE THEORY.

It is impossible for me in the time at my disposal even to indicate the various phenomena which have received a

simple explanation from this one hypothesis of the existence of free ions in solution. Originally intended to account for the phenomena of electrolysis, it affords a basis for dealing quantitatively with numberless other magnitudes, and has thrown a light on the general behaviour of salt solutions, where all was formerly darkness and confusion. The fundamental assumption may appear to us distasteful, but on careful consideration we find it to be at variance not with the facts, but only with our preconceived opinions and interpretations of the facts. Anyone who has made himself familiar with the new mode of viewing the phenomena observed in solutions of acids, salts, and bases, finds it indispensable, and what I would venture to urge is its early introduction in the teaching of elementary chemistry. What the student first meets with in his practice is the behaviour of these very substances. Let a course of elementary theoretical chemistry, therefore, begin, not with the comparatively useless study of the elementary and compound gases, acquaintance with which is acquired only to be immediately forgotten, but with the properties of acids, bases, and salts. Let him understand solubility, crystallisation, double decomposition, precipitation, and he will have little trouble in finding his way through the new and unfamiliar field of chemical phenomena. The strain on the memory is slight at first, and the facts come under general rules. My own practice in teaching is to give a table of the common positive and the common negative radicals, indicating by symbols attached to them the number of electric charges each possesses in virtue of Faraday's law. Thus, to take a few examples, we have—

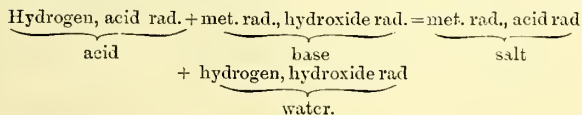
Positive radicals		Negative radicals	
H ⁺	Hydrogen	OH ⁻	Hydroxide
Metallic Radicals	K ⁺ Potassium	Univalent	Cl ⁻ Chloride
	NH ₄ ⁺ Ammonium		NO ₃ ⁻ Nitrate
	Ag ⁺ Silver		
	Hg ⁺ Mercurous		
	Hg ²⁺ Mercuric	Bivalent	SO ₄ ²⁻ Sulphate
	Ca ²⁺ Calcium		CO ₃ ²⁻ Carbonate
	Fe ²⁺ Ferrous		
	Fe ³⁺ Ferric	Trivalent	PO ₄ ³⁻ Phosphate
	Al ³⁺ Aluminium		

In writing the formula of any compound of a positive with a negative radical the student is told that the number of dots in the positive portion must be equal to the number of dashes in the negative portion. The reason for this may be taught later. Each dot represents one charge of positive electricity; each dash represents one charge of negative electricity. As the solution of the compound is electrically neutral the positive electricity must balance the negative electricity, and, therefore, the number of dots must equal the number of dashes. Once he learns his table, and grasps this principle, he makes few mistakes in writing formulæ, and I do not find such compounds appearing as CaCl and NaSO₄. He writes Ca·Cl₂/Na₂SO₄·Ca₂(PO₄)₂(NH₄)₂Mg·PO₄, &c.

Acids, bases, and salts in solution are defined as follows:—

Acid	Hydrogen, acid radical
Base	Metallic radical, hydroxide radical
Salt (normal)	Metallic radical, acid radical
Water	Hydrogen, hydroxide radical

Neutralisation is easily seen to be an interchange of radicals with formation of water, thus:—



Acid salts—e.g., Na·H·SO₄, have hydrogen as part of the negative portion; basic salts—e.g., Hg²⁺(NO₃)₂(OH)₂ have hydroxyl as part of the negative portion. The relation between hydroxides and oxides, and between acids and their anhydrides, follows naturally. A few notions as to solubility complete the student's preliminary equipment, e.g.:—

All normal nitrates are soluble.

All salts of the alkali metals are soluble

All chlorides are soluble except those of Ag, Hg, Pb.

All sulphates are soluble except those of Ca, Ba, Sr, Pb.
All phosphates are insoluble except those of the alkali metals.
All carbonates are insoluble except those of the alkali metals.
All hydroxides are insoluble except those of the alkali metals.

Equipped with these and similar rules, and the principle that when two ions by their union can form an insoluble compound, they do so when they meet in the same solution, the student in a very short time gains a practical command of his knowledge of solutions that enables him to apply it successfully to his ordinary laboratory-work.

DEFENCE OF TEST-TUBE WORK.

And here I would say a word in favour of the much-condemned test-tubing. Of course when a student learns his testing parrotwise from a table, the knowledge, like all parrot knowledge, is educationally worthless, and it is no doubt the chief drawback of test-tubing that it lends itself so readily to be "crammed up" in this manner. But if test-tubing is properly studied, its educational value is in my opinion quite equal to that of the mock quantitative work now so often inflicted on the luckless beginner by those in authority in high places. Let the student add sodium-hydroxide solution to solutions of all the common metallic salts in succession, note what happens, and tabulate his results. Let him divide, say, the metallic radicals into those that give no precipitate, those that give white precipitates soluble in excess, those that give white precipitates insoluble in excess, and those that give coloured precipitates, arranged according to their colours. Let him do the same with other reagents—ammonia, hydrochloric acid, sulphuretted hydrogen, ammonium sulphide, ammonium carbonate, and so on. He will thus acquire an easily-remembered stock of reactions which enable him to detect the ordinary radicals independently of any book or table, and serve as material to exemplify the rules given in the theoretical portion of his course. It is afterwards an easy step to analyse mixtures in an intelligent manner.

THE CONCEPTION OF A SALT.

I am not of course claiming for the new theory the merit of conceiving salts as composed of an acid radical and a metallic radical. That mode of viewing salts is half a century old, but it brings the mode into prominence and gives it a meaning that it did not formerly possess. It gives in the degree of their dissociation a criterion of the strengths of acids and bases, and it has numberless applications to the problems that are met with in the ordinary practice of preparative and analytical chemistry. A few examples may serve to illustrate its use.

If we wish to prepare a pure specimen of sodium chloride, we make a strong solution of the salt and pass hydrochloric gas into it, or add to it strong hydrochloric acid solution. The sodium chloride is at once precipitated, and it is of a higher degree of purity than the specimen originally dissolved. The sodium salts of the aromatic sulphonic acids are often obtained pure from solution in a similar way. To the solution is added either strong brine or solid caustic soda. In either case the sodium sulphonate falls out. Another familiar example of a similar process is the salting-out of soap. The theory of the process is in each case the same. It is a well-known principle of theoretical chemistry that if a substance is dissociated in any way whatever, the addition of one of its dissociation-products diminishes the degree of dissociation, and this in the greater measure as the dissociation is slight. Now in each of the above processes a substance is added which has one ion in common with the original substance. The degree of dissociation of the original substance is therefore diminished. The solubility of a salt in water seems to be regulated, not as we might at first be disposed to imagine, by the total amount in solution, but rather by the amount of undissociated salt in solution. If we, therefore, increase the amount of undissociated salt in a saturated or nearly saturated aqueous solution, the solution will become supersaturated and the excess will fall out. Let us take the example of the purification of sodium chloride. In a strong brine the sodium chloride is dissociated to the extent of some 30 per cent. It is the remaining 70 per cent. of undissociated substance that determines its solubility. If now we pass gaseous hydrochloric gas into the solution it dissolves, and, being highly dissociated, contributes both

hydrogen ions and chloride ions to the solution. Now the products of dissociation of the salt are sodium ions and chlorine ions. The addition of hydrochloric acid, then, means the addition of one of the products of dissociation—viz., chloride ions—and consequently the degree of dissociation of the sodium chloride is diminished—i.e., the amount of the undissociated salt is increased. But if the solution is saturated, or nearly so, with the undissociated substance, the saturation-point will be passed as soon as the hydrochloric acid is added, and the excess then falls out. Similarly the sodium salts of sulphonic acids, which are not very soluble, can be thrown out of solution by brine or strong caustic soda. All these substances when dissolved in water yield sodium ions. The solubility of the sodium sulphonate is thus diminished when the sodium chloride or the sodium hydroxide is added, and a portion of the salt is deposited.

SALTING-OUT SOAP.

In the manufacture of ordinary soda-soaps the sodium salts which constitute the soap are dissolved in relatively too much water, and are contaminated with excess of glycerine and other substances. To purify them and get a curd-soap the solution is salted out—i.e., salt is added till the soda-soap separates out of solution as a hard curd. The sodium salts and the sodium chloride have the sodium ion in common, so that the solubility of the former is diminished on the addition of the salt, with the result that a large proportion separates out in a fairly pure state. Any other compound which gives sodium ions plentifully when dissolved in water will salt out a soap as well as common salt. Thus, if excess of a very strong solution of caustic soda is used to effect the saponification, the soda-soap separates out as the saponification progresses. Here the sodium ions come from the caustic soda. Finally it should be noted that soft soaps—i.e., potash-soaps—cannot be salted out with common salt. The reason is obvious. The positive ion of the potash-soap is potassium, and in adding sodium chloride we neither supply a similar positive nor a similar negative ion. Thus the solubility of the potash-soap is not diminished, and there is no salting-out.

INDICATORS.

To give another example in conclusion of the application of the new dualism to practical chemical problems, I may refer to the theory of indicators. The ordinary indicators used in acidimetry and alkalimetry are useful in so far as they assume a different colour in acid, neutral, or alkaline solution. The difference of colour is due to the ions of the indicator having one colour and the undissociated molecules another colour. Our ordinary indicators are as a rule feeble acids, and those chiefly used are litmus, methyl orange, and phenolphthalein. When phenolphthalein is in the undissociated state—e.g., when it is a solid—it has a feeble yellow tint. When dissolved in water it is still colourless, for the extent to which it is dissociated into ions is so vanishingly small that the colour of the negative ion is not apparent. As soon, however, as we add a small quantity of a strong base, the acid is converted into a salt, and salts of weak acids are as much dissociated as salts of strong acids. Negative ions, then, are at once produced from the salt, and, as they have an intense pink colour, their formation is rendered evident. The addition of even a very minute portion of alkali over the point of neutralisation is, therefore, indicated in an unmistakable manner. As weak acids do not combine readily with weak bases, phenolphthalein does not indicate well when a feeble base, such as ammonia, is employed. The end point here is not sharp, as a considerable excess of ammonia has to be added before the unstable ammonium salt of phenolphthalein is formed to an appreciable extent.

Methyl orange is an example of a fairly strong acid indicator. Its undissociated molecules are red, its negative ions are yellow. When dissolved in water it dissociates partially, so that both negative ions and undissociated molecules are present, with the result that the colour is intermediate between yellow and red—viz., orange. Being an acid its positive ions are hydrogen ions. When, therefore, we add a small quantity of a strong acid to it, we add one of the products of dissociation—viz., hydrogen ions—whereby its

dissociation is greatly diminished, and the orange colour changes to red. When, on the other hand, an alkali, even a weak one such as ammonia, is added, the methyl orange at once forms a salt with it, and the orange colour is transformed into the yellow colour of the negative ions which are produced from the salt. Methyl orange, then, is the proper indicator to use with strong acids and feeble bases. If the acid to be titrated is a weak one like acetic acid, it has practically no effect on the methyl orange, which is then the stronger of the two acids, and instead of having its own dissociation greatly diminished, rather diminishes the dissociation of the other acid. A solution of sodium acetate or of sodium carbonate behaves therefore to methyl orange just as a solution of caustic soda would. Litmus is an indicator of a strength intermediate between phenolphthalein and methyl orange, and lacmoid is similar.

These instances may afford some idea of the applicability of the hypothesis of electrolytic dissociation to ordinary problems of practical chemistry. It frequently gives a simple explanation of otherwise unintelligible details of chemical practice. In theoretical matters it is indispensable.

THANKS.

Professor JOHN GIBSON, of Heriot Watt College, and a member of the Board of Examiners for Scotland, said he had great pleasure in moving a hearty vote of thanks to Professor Walker for his most admirable *exposé* on the subject of dissociation. One characteristic of the science of chemistry was the repeated changes that had taken place in chemical theory within recent years. He could look back to the times when he was taught chemistry by his old teacher, Bunsen, in the earlier dualism, which found in him one of its most determined opponents. He was still a young man, and yet there that night they had listened to a clear and able *exposé* of another adopted theory of chemical affinity.

Mr. BOWMAN seconded the vote of thanks, which was cordially given.

IMPROVEMENTS.

The ASSISTANT - SECRETARY directed attention to the library which has now been removed to the old board-room, and fitted with electric light, and the museum, which includes the materia-medica collection, transferred to the Society by the Royal College of Physicians. A small portion of the collection had been placed in the centre-floor case in the museum. This, he said, consisted to a very large extent of the collection made by Professor Theodore Martius, Professor of Materia Medica in the University of Erlangen, who was an hon. member of the Pharmaceutical Society, and a frequent contributor to its journal. The small portion shown would give an idea of the extent and richness of the collection. He also referred to the receipt from the Glasgow Committee of a copy of the Conference photographic group, which he said would be hung on the library wall.

The members then adjourned to the library, where refreshments were served.

Wills of Deceased Chemists.

The will of Mr. Robt. W. Baker, chemist and druggist 62 Princes Road, Notting Hill, who died on June 24 last, has been proved by Mrs. Baker, the widow and sole executrix. The personalty amounts to 279*l.* 13*s.*

The will of Mr. John Porter, chemist and druggist, Coalville, who died on November 8, 1896, has been proved by Mr. J. T. Porter, the son and sole executor of the testator, whose personalty is sworn at 768*l.* 9*s.* 2*d.*

The will of the late Mr. John Howard, chemist and druggist, Ely, has been proved by Mrs. Howard, the widow, and Messrs. Richard and J. Ashworth, the brothers-in-law of the testator, whose personalty is sworn at 3,394*l.* 7*s.* 2*d.*

The will of Mr. James Bordass, chemist and druggist, of Great Driffild, who died on July 3 last, has been proved, with a codicil, by Mr. Thos. House and Mr. F. J. Brigham, both of Great Driffild, the executors of the testator, whose personalty is sworn at 3,060*l.* 6*s.* 9*d.* gross and 2,945*l.* 17*s.* 1*d.* net.

The Winter Session.

PHARMACEUTICAL SOCIETY OF IRELAND.

THE second evening meeting of this session was held in Dublin on November 29. The chair was taken by the President (Mr. Downes), and a lecture on "The Zoo: Its Inmates and Its Outmates" was delivered by Dr. E. MACDOWEL COSGRAVE, professor of biology in the College of Surgeons of Ireland, and formerly one of the Society's examiners. The lecturer spoke of a number of the animals in both the Dublin and the London Zoological Gardens, and also of the same animals and others in their wild condition, giving interesting information as to their habits of life and pointing out traits and peculiarities that are only revealed to keen observers. The lecture was illustrated by a number of beautiful slides. Amongst the most interesting of these were a series of studies of elephants engaged in eating and drinking, in which the wonderful structure of the trunk was well displayed; and a long series of slides which analysed the movements of the polar and the brown bear. Slides showing the grotesque attitudes of the camel when reclining and when resuming an erect position caused great amusement. The subject of protective resemblances was well illustrated by reference to the exertions of the ostrich, the Japanese deer, and the zebra; and the movements of birds were also discussed. The lecture was interspersed with amusing anecdotes. The lantern was admirably worked by the Vice-President, Mr. Beggs.

On the motion of Mr. DORAN, seconded by Mr. SMITH, a vote of thanks was passed to Dr. Cosgrave for his lecture.

MIDLAND PHARMACEUTICAL ASSOCIATION.

THURSDAY, November 25, was the first business meeting of the winter session, and was held at the Grand Hotel, Birmingham. The subjects discussed had been suggested at a meeting of the Federation of Local Pharmaceutical Associations held at Glasgow in August last. The President (Mr. F. J. Gibson, Wolverhampton) was in the chair.

Mr. CHARLES THOMPSON introduced the subject of

PROVINCIAL ORGANISATION.

The first part of his speech was retrospective. He reminded his audience how at the opening meeting of the Midland Association in 1892 he advocated that the country should be divided into sections, each of which should constitute a branch of the parent Society with an elected representative on the London Council. At that time he received replies from many local secretaries throughout England and Scotland, expressing approval and otherwise of his scheme. He had to confess, however, that after five years' consideration of the subject he had somewhat modified his views. The time had not yet come for them to have branches of the Pharmaceutical Society scattered over the land. But he was pleased to find that local associations were being formed, and he believed there was more life in the older associations now than ever before. These associations linked together by the federation would, he thought, infuse more life into their midst. He quoted with approval extracts from Mr. News-holme's recent speech at Nottingham as to what local associations might do, and what the Council of the parent Society did, and went on to say that while he sympathised with the Council in their difficult work, he thought it would be a distinct gain to pharmacy if some of the older members could be transferred into a sort of House of Lords. The phrase "Once a Mason always a Mason" might very well be altered to "Once a Councillor always a Councillor." (Hear, hear.) Without being at all personal he suggested there should be an age limit—say, 65—at which councillors should be ineligible for re-election. He was also of opinion that no office, however good the official might be, from the president down to the local secretary, should be held at any one time for longer period than three, or possibly four, years. He concluded by moving—

That it is desirable that every pharmacist in business, in addition to joining the Pharmaceutical Society of Great Britain, should consider it his duty to join some local organisation, and that such association should, without exception, join the Federation.

Mr. J. POOLE seconded.

Mr. A. SOUTHALL suggested that the resolution went beyond the subject of provincial organisation. Outside organisation was all very well, but what they wanted first was to put their own Society in better order. Birmingham was one of the first Associations formed by Jacob Bell in olden days. In 1849 they had a fairly substantial Association. In those days the doctors came to their meetings. (Hear, hear.) About thirty years ago, he remembered, there was a great cry about prices, and the Birmingham chemists formed a committee—Mr. Arblaster, Mr. Alfred Bird, and himself—to prepare a price-list. For some time that was fairly adhered to, but by-and-by complaints were made of chemists not sticking to the list and not putting on the pre-arranged mark. Then came another dark period, and Mr. Barclay persuaded Mr. Redwood to come to Birmingham and stir them up, and they had some very successful meetings. At intervals since then they had tried to stir up the Association by exhibitions and dances, and latterly by dances without exhibitions. At present they did not seem to have got the ear of the chemists. What they wanted was a real trade organisation which would really keep them together and enable them to help each other. There was not the adhesion amongst them there ought to be. Societies in other parts of the country had the same experience as Birmingham. At present there was no education going on, and they had really no social end. If they had the organisation in Birmingham they ought to have, they could dictate to the Pharmaceutical Society. The Pharmaceutical Society ought to have a membership of 12,000 or 13,000. He understood there were 15,000 or 16,000 eligible. In London they had talked about Pharmacy Bills, but they could not get much legislation because they did not get sufficient support. In Birmingham they had not done much in the way of supporting these Bills. He had tried once or twice to influence members of Parliament, but the invariable reply was, "What sort of association have you in Birmingham; how strong are you?" When they had good societies all over the country they might do some good by federating; at present they had only weak societies to federate.

Mr. J. SPILSBURY agreed it was easy to grumble against the parent Society, but it was not so easy to suggest a remedy. Mr. Carteighe, speaking to him about the non-success of his provincial tour, said in some centres, when he placed his views before the members, they seemed to agree with them and to be striving to do their best to organise, but afterwards he saw some very strong letters in the trade journals expressing quite an opposite opinion. So that if the opinion of pharmacists connected with provincial associations was so fickle it must confuse the Council. He thought Mr. Thompson's scheme of dividing the country into sections might have good results. If the delegates met only once in six months at Bloomsbury Square, and were, in a measure, affiliated with the Pharmaceutical Council, they would carry great weight.

Mr. H. JESSOP, speaking as President of the Assistants' Association, said that body thoroughly approved of the resolution.

The PRESIDENT said Mr. Southall had told them a great deal about the decay of their local associations. He wished Mr. Southall had told them how to build them up. The Midland Association had a membership of 198, and ought to command respect. If Mr. Southall, when asked by the M.P.'s about the strength of the organisation, had taken steps to have the whole of the chemists canvassed a great number of signatures could have been obtained to a memorial on behalf of any Bill for the benefit of the craft.

Mr. F. H. ALCOCK pointed out that the resolution excluded assistants. He assumed the resolution was intended to include all engaged in pharmacy, and

Mr. BOUCHER added that it excluded those who were not members of the Pharmaceutical Society.

After some conversation, Mr. Thompson altered his motion to read—

That it is desirable that all pharmacists and pharmaceutical students should consider it their duty to join their local organisation, and that such local associations should without exception join the Federation.

In this form the resolution was passed without dissent.

PROPOSED MODIFIED EXAMINATION—CRITICISING THE SCOTCHMEN.

Mr. F. H. ALCOCK opened the discussion on the subject of a proposed modified examination. There had arisen in some parts of the country among employers and employed a desire for a milder examination than the "Minor" to enable men to perform certain duties which at present it was not lawful for them to do. The cry was heard most amongst pharmacists who from the size of their businesses or otherwise were not able to employ qualified assistants, and who relied for assistance upon their wives, apprentices, or errand-boys. To sanction such a "little go" as was suggested would, in his opinion, be fraught with great danger to the public and to their calling. It might benefit the pharmacist by enabling him to get cheaper assistance, but it would retard the progress of education and tempt the possessor of such a certificate to stop there and sell his labour more cheaply than the fully-qualified Minor man could afford to do. If young men would work hard and honestly, and think more of their business and less of their beer, 'bacca, billiards, and bicycles—(laughter)—there ought to be no difficulty about their getting the legal qualification. He did not object to an intermediate examination to test progress. He moved—

That this meeting of pharmacists consider it is not desirable in the interests of pharmacy to have a modified examination for assistants which would carry with it any qualification to sell or dispense scheduled poisons.

Replying to a question by Mr. SOUTHALL,

Mr. R. D. GIBBS said the request for this modified examination originated in the North of Scotland. The underlying principle was that there was a dearth of qualified assistants in Scotland. He presumed the tone of the Scotch character was highly moral, and that it hurt the feelings of a Scotchman to know that he was offending against the law, and inasmuch as the number of qualified men was so small that practically nine out of every ten pharmacists were carrying on an illegal business, it was thought this modified examination would remedy this state of affairs.

Mr. SOUTHALL did not think they should assist their Scotch friends in giving any modified qualification to dispense poisons.

Mr. LAWTON seconded Mr. Alcock's motion. The proposal for a modified examination was a suggestion coming from Scotland, and containing the worst feature any proposal addressed to pharmacists could have. Any inferior qualification would seriously encroach upon the rights of the Minor men. This new qualification would invite a rush of undesirable men into the profession—undesirable because they would be attracted by a cheap and easy examination. They would consequently hold the profession of pharmacy cheaply, and act as a drag to the evolution of the complete pharmacist. To create a qualified assistant who was debarred from opening a shop for himself was exactly what was desired by the enemies of pharmacy. Such assistants, content to be mere handers-out of packed-up articles, would soon find their places in the worst type of drug-stores. It had taken the Pharmaceutical Society a generation of patient effort to bring the position of pharmacists to its present state of efficiency; and it was only the fact of the Society representing a well-educated and efficient body that it could consistently apply to Parliament for fresh powers. (Hear, hear.) To propose an inferior qualification in the body pharmaceutical would rightly provoke a vigorous opposition from the present holders of the Minor qualification who were not in business on their own account. The Society was the custodian and protector of the interests of the qualified men, and it would be inconsistent with their duty to them to open a side door for admission of a new and inferior class to compete with them just as a better and brighter prospect awaited them.

Mr. BOUCHER said in Scotland many chemists dispensed for the doctors, and probably the reason of the scarcity of assistants was that a great many came to England, where they got more money.

The resolution was then carried without dissent.

INDICATING THE SELLER.

This was the last subject discussed, and it was introduced by Mr. R. D. GIBBS in the following resolution.

That in the interest of the public it is desirable that some means should be adopted to show who is the legal seller in establishments where there is an absence of indication.

Mr. Gibbs explained that he spoke as a member of the Association, and not as Secretary to the Federation. Referring to the decision of the House of Lords in the company case, Mr. Gibbs said his own opinion was that the question should never have been allowed to rest, and, although late in the day, he would be willing to unite himself with those who would still contest the right of a company to take upon themselves the personal qualifications involved when they called themselves chemists. We contend they must accept the decision, and the question was, How were they to preserve their remaining interests? The great principle which governed the case was that it was no longer necessary that capital and labour should, for the purposes of the Act, be provided by the same persons, provided the persons registered themselves under the Companies Act. That divided the business into two interests—the financial interest and the labour interest. There was nothing that they could do, or were likely to do, which could affect capital; but the labour interest was a very different one, and it was the only thing saved from the wreck—the only thing they had got in exchange for their premiums, their apprenticeship, their study, and their close confinement; it was the only thing they could look forward to in the future. It appeared to him they should insist upon selling their labour on equal terms; and in order that the terms might be equal, the purchasing public, and they themselves, must be protected from unqualified labour vended as qualified. As the law declared the person who made the sale to be the seller, and the seller assumed to be qualified, they asked that it should be open to the public to know that the seller was properly qualified.

Mr. SPILSBURY asked how could they compel a company to put up the name of the actual dispenser when there were hundreds of establishments in the country being conducted under other names than those of the actual qualified chemist? He instanced a case in London of a London business which some years ago was owned by a retired major. The reputation of the firm was so great that thousands of prescriptions went to the establishment under the impression that they were being made up by those whose names composed the firm. This resolution would touch pharmacists from the highest to the lowest.

Mr. SOUTHALL said the condition of things was very different in Glasgow to what it was in Birmingham. In Glasgow the chemist was persecuted by the doctors who kept shops. It was the Glasgow people who were anxious for this resolution.

Mr. GIBBS said the resolution represented the general sense of the country, and not of the Glasgow people alone.

Eventually Mr. LAWTON seconded the resolution, but, on a vote being taken, it was defeated by a large majority.

SOCIETY OF CHEMICAL INDUSTRY.

NOTTINGHAM SECTION.

A MEETING was held on November 24 at University College, Nottingham, when there was a fair attendance. Amongst the members present were:—Dr. Clowes (President of the Society), Dr. Sudborough, and Messrs. Adams, Carulla, Caven, Golding, Pentecost, Ward, &c.

The CHAIRMAN (Mr. James O'Sullivan) read a paper on

THE UNORGANISED FERMENTS OR ENZYMES CONCERNED IN THE BREWING AND DISTILLING INDUSTRIES.

The subject was introduced by showing the distinction that exists between the digestion in highly-organised animals—which is entirely external, as the alimentary canal is simply a continuation of the external skin—and the interstitial digestion, which is that generally observed in the vegetable kingdom. The varied food consumed by man requires for its digestion seven or eight soluble ferments or enzymes. Similar ferments are concerned in the production of brewers' and distillers' wort. One enzyme is obtained from barley—namely, diastase of translocation, which does not erode starch-granules or liquefy starch-paste, but dissolves "soluble starch." From germinated barley or malt two enzymes are

derived—namely (1) *cytase*, which dissolves cellular matter, and is rendered inactive on heating, therefore is not present to any extent in kiln-dried malt; and (2) *diastase* of secretion, which liquefies and hydrolyses starch-paste at all temperatures up to 80°. The author explained the difference between the requirements of the brewer and those of the distiller, and concluded by saying that he had given no analysis, as there were reasons for believing that we did not know yet with certainty the composition of these most important products of life.

Dr. SUDBOROUGH said he had noted with much interest how often the Chairman had quoted English, and, as a rule, Burton, chemists as authorities. Two diastases had been mentioned having different properties. It seemed a matter for regret that two evidently distinct substances should have the same name. Wroblenski had recently shown that the ordinary diastase of malt could be separated into two different compounds.

Mr. O'SULLIVAN replied that it certainly was objectionable for the two diastases to have the same name. Fischer must have felt this when he called one beer-yeast glucase. It was also desirable to always mention the source of origin, and say, for instance, "barley diastase" or "maize diastase." In regard to the composition of diastase, it had been known for some time that it contains an albuminoid and a carbohydrate.

Mr. FEILMANN then described

A NEW FORM OF CONDENSER

which had been devised by Dr. Sudborough and himself. The condensation occurring outside the ordinary reflux glass condenser, which runs down, sometimes causing much trouble, had led them to reverse the arrangement, and instead of admitting the cold water into the annular space they made it pass through the inner tube, and used the annular space for the vapour to be condensed. They did not claim any novelty of principle, as it was precisely the same as that of the Soxhlet condenser. For either they had found the new arrangement a decided improvement on the old.

Mr. JOHN GOLDING described a very simple arrangement he had seen at Copenhagen, where fifty condensers were at work at the same time, in two sets of twenty-five. The condenser may be described as a long closed metal cylinder, the top end having a projecting cover to which the water admission and exit tubes are attached. A long piece of wide combustion-tube is drawn out to fit the cork of the ether-flask. The oil-cake to be extracted is placed in the tube, and the condenser is introduced, the projecting cover allowing it to rest on the brim of the tube. Mr. Golding thought this a very cheap arrangement, and it was most efficient, as he could not detect any smell of ether.

The CHAIRMAN, Mr. WARD, Mr. TEUEMAN, and others joined in a discussion.

URINE-ANALYSIS.

THIS was the subject of a chatty demonstration by Mr. E. W. Lucas, F.C.S., director of Messrs. John Bell & Co.'s laboratory, given to the Chemists' Assistants' Association at 73 Newman Street, W., on Thursday, November 25. Mr. Lucas had brought four samples of abnormal urine, containing albumin, sugar, blood, and bile. The physical characteristics of the sample were first observed, and apparent abnormality noted. Normal urine is of a pale-amber colour. Typical diabetic urine is often very pale; the colouring-matter of dark urine may be bile-salts, blood, or excess of the ordinary pigments. Blood gives to urine a characteristic smoky appearance. The physical nature of any sediment is noticed. The specific gravity of the sample is then taken with the hydrometer. The sample of albuminous urine had a sp. gr. of 1.005. Normal urine varies from 1.015 to 1.025. Diabetic urine sometimes reaches as high as 1.040. The reaction of the sample was alkaline to test-paper. Normal urine is slightly acid, and Mr. Lucas referred the alkalinity of the sample to the action of some drug. The simplest test for albumin is Esbach's solution of picric acid and citric acid. The urine must be filtered, and an equal volume of the solution added; in the presence of much albumin a white precipitate falls, mere traces being indicated by the cloudiness of the liquid. This test detects minute quantities of albumin. Another and more common

test is to heat the clear urine, previously made very slightly acid with acetic acid, boiling the top part of the liquid; present, albumin is coagulated, and imparts an opalescence to the heated portion. For a quantitative estimation of albumin Esbach's albuminometer is commonly used. This consists of a test-tube fitted on a pedestal, and graduated upwards, one to seven. The tube is filled to a mark U with the urine to be tested, and Esbach's solution added to a mark R. The tube is gently inverted so as to mix the solutions, and is then allowed to stand for twenty-four hours. The height at which the sediment stands indicates the quantity of albumin. The results are approximate, but Méhu's is a more accurate method. The urine is acidified with acetic and nitric acids, and a mixture of acetic acid, carbolic acid, and rectified spirit is added. The precipitate is filtered out, washed with cold 4-per-cent. solution of carbolic acid, dried, and weighed. Urines containing blood or pus always give the reactions for albumin.

Mr. Lucas then commenced the examination of the saccharine urine. This had a high specific gravity (1.035) and a dark colour, with acid reaction. The old-fashioned test for sugar, Fehling's solution, is now relied upon less than formerly, as the large number of highly complex organic bodies, forming a part of our modern materia medica, many of which are eliminated in the urine, exert a reducing action on Fehling's solution, and thus vitiate the results if the patient has taken the drugs. A more reliable test is Sir George Johnson's, which consists in boiling the urine with a mixture of equal parts of saturated solution of picric acid and caustic soda. A precipitate is first formed which dissolves on boiling, and the solution becomes of a deep-brown colour in the presence of sugar, the picric acid being reduced to picramic acid. The quantitative estimation of sugar may be made by titration with Fehling's solution, preferably by using Pavy's modification of the solution. Sir George Johnson's colorimetric method is very easy of application. The apparatus used is called a picro-saccharometer, and consists of a stoppered-tube, 100 c.c. capacity, graduated from below, bracketed to which is a short tube to contain the comparative colour fluid. This standard colour-solution was originally made by boiling a solution of glucose 1 gr. to the ounce with the soda-picric acid, but a more stable solution is now made of the same colour with perchloride of iron and acetic acid. To estimate sugar in the picro-saccharometer a measure of urine is boiled for one minute with picric acid and alkali. If the resulting liquid, placed in the graduated tube, is lighter than the standard-colour fluid, less than 1 gr. of sugar per ounce is present. If the boiled fluid be darker, it is diluted with water until the colours are of equal intensity, and the amount of sugar is deduced from the extent of the dilution. A deduction of 1 gr. per ounce from the ascertained result is usually made on account of the reducing action of creatinine upon picric acid. The sample under examination, estimated by this method, was found to contain 7 gr. per ounce.

For the estimation of urea Mr. Lucas used a "Gerrard's" ureometer, which is a modified nitrometer. By the action of alkaline hypobromite of soda solution the urea is split up, giving off nitrogen and carbonic-acid gas, but the latter being absorbed by the alkali, the nitrogen is read off from the graduations on the tube denoting parts per 1,000. The sample under examination contained 18 per cent. In normal urine urea varies from 2 per cent. to 3 per cent.

Turning to the urine containing bile, Mr. Lucas said that the Pharmacopœia test, a modification of that of Pettenkofer, could be used to detect bile-salts. A better test is that due to Oliver. A filtered solution of commercial peptone with salicylic and acetic acids is added to the filtered urine when in the presence of bile-salts a precipitate falls.

Blood is detected by both microscopical and chemical means. In many cases blood-discs may be identified under the microscope, but occasionally the urine contains blood-pigments without discs. Day's test is that commonly used. Tincture of guaiacum, freshly made from picked unoxidised pieces of resin and excluded from light, is added in small quantity to the suspected urine, followed by ethereal solution of peroxide of hydrogen. In the presence of blood a blue colour is developed. This reaction is not infallible, and should be confirmed by Heller's test—boiling a sample with caustic potash and allowing the deposit to settle, when the supernatant liquid will be of a bottle-green colour. The

deposits of urine are identified microscopically and by their chemical deportment. In order to explain the microscopical identification of deposits Mr. Lucas showed a series of lantern-slides on the screen, describing them and their sources. Twelve slides showed uric acid in an infinite variety of forms, from large halberd-shaped crystals to microscopic plates. Triple phosphate was exhibited on eight slides, the demonstrator explaining the slow transformation from feather to prism. Ammonium urate, calcium phosphate, and calcium carbonate, hippuric acid, tyrosin, and cystin were amongst other crystals shown. Many slides of hyaline, epithelial, and fatty casts, blood, and pus, accidental contaminations such as cotton and linen threads, moulds, &c., were also exhibited.

Mr. T. MORLEY TAYLOR (President) hoped all qualified members of the Association were able to make a cursory examination of urine, but he thought all had received many additions to their knowledge that evening.

Mr. PEARSON said much attention was being paid to the presence of acetone in diabetic urine, which was supposed to be the cause of diabetic coma. He was not able to find a test in the text-books, and asked what means of identification Mr. Lucas would recommend.

Mr. HILL thought more attention should be paid to the presence of traces of albumin. He could commend Naplander's bismuth-test for sugar.

Messrs. ROE, ROBINSON, and TOMPSETT joined the discussion.

Mr. LUCAS, in reply, said the presence of a trace of albumin was of importance. Picric acid precipitates both peptone and albumin. The peptone precipitate dissolves on warming and the albumin precipitate is increased. For the separation of acetone the urine should be distilled as recommended by Messinger, and the acetone estimated as iodoform. For simple detection Legat's process may be applied. The estimation of uric acid is a difficult matter. It is best precipitated as acid ammonium urate, which is afterwards decomposed by H_2SO_4 in excess, and then titrated back by soda. He thanked the Pharmaceutical Society for the loan of the lantern, and Professor Greenish's assistant for acting as lanternist. He then presented to the Association an album of photographs taken from the slides exhibited.

IRISH PHARMACISTS' ASSISTANTS' ASSOCIATION.

At Dublin, on November 26, Mr. J. Boyd Alister, L.P.S.I., presided over the usual fortnightly meeting in the absence of the President. The attendance included Miss Ada Wyatt, L.P.S.I., and another young lady. Mr. Vincent Johnston, Hon. Secretary, said letters had been received from a number of employers cordially approving of the new employment-agency, and promising to avail themselves of it when they required assistants. Only one employer wrote disapproving. Mr. T. W. Robinson, Kingstown, had promised to read a paper in February or March. The annual dance was fixed to take place early in January, and Messrs. Hardy, Taylor, and Dunwoody were appointed a sub-committee to carry out the arrangements. Circulars inviting the members to compete for the Association book-prizes for the best essay on "An Ideal Pharmacy" were issued. A debate was then held on the following subject:—

IS IT NECESSARY TO HAVE AN INTERMEDIATE EXAMINATION FOR THE PHARMACEUTICAL LICENCE?

Mr. H. HUNT, L.P.S.I., who led for the affirmative, spoke of the advantages accruing from a continuous course of study from the passing of the Preliminary onwards. An intermediate examination would compel employers to give their apprentices a reasonable time for study. An intermediate examination, he argued, meant the acquirement of more science, and this would give the pharmacist a better standing with the public and the medical profession.

Mr. D. O'SULLIVAN, L.P.S.I., in replying, said he sympathised with no object which threw obstacles in the path of students and made them sink deeper and deeper in the mire of pharmaceutical study. Mr. Hunt had given no proof of the necessity for an intermediate course, and so far from the higher education of the pharmacist bringing him into closer relations with the doctors, or that the medical profession

would seek advice from the chemist, he believed the result would be rather to create jealousy and suspicion. As a matter of fact, they had at present an intermediate test in the shape of the Assistants' examination. He thought this was quite sufficient, as the test was a very good middle course between the Preliminary and the Licence examination. He contended that there was no reason in making chemists' lives harder than they were already, especially when no benefit would result. The public would go to the house that sold the cheapest article, and so long as an assistant supplied what was wanted they did not care whether he was high up or low down in the scale of science.

Mr. DUNWOODY, L.P.S.I., supported Mr. Hunt, arguing that steady reading, first for the intermediate and afterwards for the Licence, was the way to ground a man well in his future work. Mr. ALISTER argued that examinations were no test of a person's knowledge, and that extra examinations were merely road-pavers to superficial knowledge acquired by cramming. He did not object to the higher education of the pharmacist, but he did object to that end being arrived at either at the expense of the employer or the employé, and he certainly discouraged anything tending to make the already hard lot of the assistant harder.

Ultimately, a vote having been taken, it was announced that the negative side was carried by a majority of ten votes.

LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

A MEETING was held at the University College on Thursday, November 25, Mr. Pierson (President) in the chair. Messrs. Stower, Whistle, and Powell were elected members.

MISCELLANEOUS ITEMS.

Miss E. M. WOOD exhibited a fungus of a brown colour, exactly resembling the colour of a burnt heath upon which it was growing, and stated she believed it was the imitative assumption of colour for the purpose of self-protection. Miss Wood also showed a specimen of the Jew's ear or Judas fungus (*Exidea auricula Judæ*), found growing on old elder-trees.

Mr. PIERSON said he was strongly impressed with the advisability of chemists adopting the system of stamping prescriptions only on the back, thus avoiding frequent obliteration; and also thought it was desirable to use a slightly smaller stamp than those sometimes employed. He passed round a specimen of a woolfat cold-cream (lanolimentum leniens) made from the form of the German Pharmacopœia supplement, published in the *C. & D.*, August 28, page 369. The sample shown was a very fine preparation, and was admired by all present.

Mr. H. B. Morgan sent a tracing of a foreign prescription, either Swiss or Italian, viz.:—

Tr. valer. æth.	...	...	...	5
Tr. chin. comp.	...	...	...	25
Tr. eich. spt.	...	...	...	1
Ol. menth. pip.	...	...	...	mij.

M.

Half a teaspoonful after meals.

It was noted that the second and third ingredients were compound tincture of cinchona and tincture of chicory.

Mr. R. H. MITCHELL said he would like to know what was intended by the following prescription:—

1 oz. vapor. creosoti.

The pharmacopœial vapor is made with 12 minims of creosote to 8 oz. of water, and that could scarcely be what the prescriber wanted. He finally decided to send creosote, with directions as to use.

Mr. HAROLD WYATT, jun., said he was of the opinion that the vapor. creosoti of the London Throat Hospital Pharmacopœia was intended. It was made with creosote, light magnesia carbonate, and water. The directions seemed to indicate this.*

* A reference to the *C. & D. DIARY*, 1897, page 487, ought to have settled this.—Ed. *C. & D.*

Mr. MITCHELL said that the following also gave some trouble:—

Creosoti	...	...	...	...	mj.
Zinci valerianatis	...	...	...	...	gr. iij.

Ft. pilula. Mitte xxiv.

The compound yielded when massed with curd soap, 6 gr.; liquorice powder and compound tragacanth powder, 25 gr. each. The valerianate had previously been well dried on a water-bath. Mr. Mitchell further said that the following had been handed in:—

Cocain. hydrochlor.	...	...	...	...	gr. $\frac{1}{10}$.
Menthol.	...	...	...	...	gr. $\frac{1}{2}$.
Acid. tannici	...	...	...	...	gr. ij.

Ft. pastilla. Mitte xx.

This gave a perfect mess on the addition of the melted glycogelatin, and could not be sent out. The prescriber afterwards ordered fruit-paste to be used instead of the glycogelatin, and this removed the cause of the trouble.

Mr. T. S. WOKES said that though the addition of tannic acid to gelatine was bad prescribing, he had often had such things as pessaries to make of this composition, and found that they could be made all right if the tannic acid were dissolved in the least possible quantity of glycerine, and added just before the cooled mass was run into moulds.

Mrs. WOKES then read her paper on

SPONGES.

The true nature of the spongidia has long been a matter of doubt—i.e., whether they are animals or vegetables—but the lack of cellulose in them, and their need of organic food, has finally placed them in the animal kingdom. The living part (sarcode) of a sponge is a gelatinous mass composed of myriads of simple animals aggregated, situated in the so-called skeleton, composed of spongin or keratin, which is chemically allied to silk. In those sponges which are used for toilet-purposes, and which form but a small part of the spongidia family, the spongin is all that remains. Mrs. Wokes minutely described the structure of the aggregation and its home, as well as the individuals, especially emphasising the differences between the toilet-article and the hard silicious sponges found round Britain's shores and elsewhere. The life-history was gone over in detail, reproduction also being described. Mrs. Wokes mentioned that artificial fission has been practised with success in the cultivation of sponges for the market. Prompted by a suggestion made by Oscar Schmidt, the Italian Government established a cultivation-station at Lesina, off the Dalmatian coast, and experiments in the propagation of sponge-cuttings were carried on there from 1867 to 1872 under the superintendence of Von Buccich. The result was successful, but the fishers objected to this way of raising sponges. The time between the planting of the cuttings and gathering in the crop (seven years) is also against sponge-cultivation, and we may take it that a special race of patient farmers will need to be evolved before it is a complete success. Sponges are universally distributed over the globe, but they are not all toilet, or even stable, sponges. Mrs. Wokes told where the best are got—in the Mediterranean, West Indian Islands, Cuba, Key West, &c.; also how they are fished and prepared for the market—the fact being pointed out that all sponges are bleached before they reach the buyer, the lighter varieties only being more highly bleached. Speaking of the purposes of sponges in the economy of nature, Mrs. Wokes said, "Sponges have served a wonderful part in the scheme of creation. By the decomposition of their protoplasm, or sarcode, chemical changes have been materially promoted which had very important results. The silicates of soda held in solution by sea-water have been precipitated by such chemical action, and the result has been the formation of bands and nodules of flint, such as we may see intersecting and alternating in any old chalk-quarry. The spongy nature of the greater part of such flints is regarded as more or less settled. You can hardly chip off a thin flake, but you can find it crowded with spicules and with the internal casts of the same species of foraminifera as are to be found in the pure chalk. Flint seems to be forming in this manner now, especially in the deeper parts of the sea."

The paper was illustrated by a series of good lime-light views.

The PRESIDENT eulogised the lecture, remarking that it would teach them something more about an article they often had to handle and sell, but about which he was afraid their knowledge was somewhat limited. It would help them to know what they were handling, and put them in a position to talk intelligently to their customers on the subject of sponges.

Mr. MITCHELL asked what is a good method of bleaching, also where the British sponges were to be found.

Mrs. WOKES, in reply, said she believed that specimens of the British sponges could be found locally at Hilbre Island and the Isle of Man. With bleaching-agents she could not claim much acquaintance, but she thought that permanganate of potash* was not employed, as it had a tendency to dissolve the sponge.

Mr. MITCHELL said he had bleached sponge very well with potassium permanganate, oxalic acid, and hyposulphite of soda to a form given him by an old sponge-dealer.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.

At the meeting on November 27, the President (Mr. C. A. Blamey) in the chair, a lively discussion was raised on several topics. Mr. A. T. JEEVES spoke to the query of "Is the *Pharmaceutical Journal* Necessary?" Mr. W. J. DAVIES on "Should the Minor Examination be *Vivâ Voce*, or Written?" in which he gave it as his opinion that it would be a much fairer examination were it a written one; Mr. F. W. YATES on "The Future of Pharmacy," Mr. E. SANT on "Vapour Density," Mr. A. S. KENT on "Should the B.P. give Minute Descriptions of all Drugs Therein?" Mr. A. H. CUPIT on "Bone," Mr. G. H. AIRD on "The Best Methods for Making an Association of Chemists' Assistants Really Useful," Mr. W. H. ANDREWS on "Is the Patent-medicine Trade Worth Encouraging?" the PRESIDENT (Mr. C. A. Blamey) on "Should the Contagious Diseases Act be Brought into Force in England, as in France?" Mr. CHARLES KENT on "Should Every 'Minor Man' be a Member of the Pharmaceutical Society?" provided a full and varied programme.

THE GUM-BICHROMATE PROCESS.

On Wednesday evening Mr. PACKHAM demonstrated the working of the gum-bichromate process of photographic printing to the Photographic Club in Anderton's Hotel, Fleet Street, E.C. The chapter-room of the hotel was crowded, most of the leading London amateur photographers being present. The demonstration was preceded by a lecture, in which Mr. Packham stated plainly all the conditions requisite for carrying out the process; but the demonstration put the whole thing in a nutshell, and as our space is very much pressed this week we shall confine our attention to it. First, Mr. Packham prepared the gum-pigment in presence of the spectators, who smoked unceasingly and slaked their great thirst with all sorts of beverages. He took 20 gr. of vegetable black and 5 gr. each of red ochre and yellow ochre, and mixed it with 1 oz. of gum mucilage made by dissolving 20 oz. of gum arabic in 100 oz. of water. The mixing was done on a marble slab with a spatula, and was a trifle laborious; in fact, this part of the process should be done with mortar and pestle, the powders first being triturated well together, then mucilage added to make a thin paste, again very well triturated, and the rest of the mucilage mixed in. The only advantage we could see in the slab-and-spatula method was that when Mr. Packham had rubbed the powders down with the gum, he spread it over a big surface so as to see that the mixture was free from grit. A good pharmacist would determine the same thing with mortar and pestle. The gum must be fresh, said Mr. Packham, because when it goes the least sour the specific gravity alters (so he said), and the results are not so good. Had we stayed to the bitter end of the discussion, and had the right to speak, we would have suggested the addition of 1 m. of formalin to each ounce of the mucilage, which keeps it

* The sponges are dipped in a permanganate bath, then in one of hydrochloric acid (1 in 2), and finally in an alkali. There is no trickery about it, but it requires "skill and knowledge," just as the making of a good pill does.—Ed. C. & D.

perfectly, and may not disturb the process in the least. After he had obtained a smooth mixture, Mr. Packham transferred it to a teacup. He proceeded to show how it is applied to the paper. The latter is any good quality of paper, preferably hand-made. It is dipped in a 5-per-cent. solution of bichromate of potash and dried. A sheet of such paper was taken and pinned down to a deal board, with two sheets of white blotting-paper between them, with a 2-inch camel-hair sash-tool brush. Mr. Packham laid on the pigment mucilage rapidly and evenly, covering the whole surface of the paper, which puckered up owing to expansion. The paper was smoothed out by removing the pins, extending the paper, and re-pinning. Next a big camel-hair sash-tool, 6 inches long (such as are used by painters in graining—this one cost 7s. 6d.), was vigorously brushed over the painted surface until it was almost dry, the brush being occasionally wiped with a towel as the pigment mucilage accumulated on it. In actuality the paper is afterwards allowed to dry spontaneously in the dark-room, but the process was not carried further in the chapter-room. However, Mr. Packham had exposed prints with him, and while he was coating the paper he had some of these floating face downwards in water contained in developing-dishes. By the time he was ready to develop them the image had commenced to appear, some of the pigment in the light parts simply falling by gravitation. The developing was amusing in its simplicity. Mr. Packham placed a print face upwards upon a plain, smooth-grained board, sticking a pin into it to keep it from being washed off, and with a small evaporating-basin he dashed water on it repeatedly. The image sprang out steadily, but Mr. Packham was getting tired, so he said, "I'll use the brush if you don't mind; this is a primitive arrangement here; we want rushing water as from a tap or an enema-syringe," which made everybody laugh; but the ultra-conservatives grew quite morbid when they found that "the brush" was a camel-hair one, as big in the mop as a pigeon's egg, and with this he dashed the water on all parts of the print until the high lights came out pure white, and the picture stood out as clear as prints from the same negative which had been passed through the meeting. There was no "faking." Mr. Packham explained that the prints should be allowed to lie in the water face downwards for half an hour or so before they are developed by rushing water over them or brushing them with water; in fact, they develop themselves if they are allowed to lie in the water long enough. The success of the pictures depends much upon the pigments used, and there are many pigments. The mixture mentioned above gives a beautiful sepia tint, with absolute whiteness in the high lights—*i.e.*, if the paper is white. One of the beauties of the process is that any colour of paper may be employed which does not decompose the bichromate. The bichromated paper should be used within fourteen days after it is saturated.

Socialities.

EXHIBITORS DINE.

THE Medical, Surgical, and Hygienic Exhibitors' Association has justified its existence and proved a success, so on Thanksgiving Day the members, to the number of about sixty, dined together in the Caledonian Room, Holborn Restaurant. Mr. Fred. Weiss (President) occupied the chair, and Mr. F. J. Rebman and Mr. H. Blau the vice-chairs. Amongst those whom we noticed at the dinner were Dr. H. T. Maw, Messrs. Fisk and Hickey (Parke, Davis & Co.), Pirie and H. T. Butler ("Camwal"), Fassett (Fassett & Johnson), Ward (Angier's Petroleum Emulsion), Ball (Oppenheimer Son & Co., Limited), Hall (S. Smith & Co., Limited), Voigt (Liverpool Lint Company), and A. Arthur. After dinner the Chairman set a good example by making crisp, good-humoured, and short speeches in proposing "The Queen" and "The Association." As to the latter he mentioned that, originating in an obscure pub., the Association did nothing the first year (1895-96), but there being no British Medical Association Museum in England this year they had a chance of distinguishing themselves, and they had done so in the exhibition which they held in Queen's Hall—thanks to the untiring energy of the Treasurer (Mr. Rebman) and Secretary

(Mr. Blau), who had worked like niggers. (Applause.) They had profited so well financially by the exhibition that the committee had resolved to hold one annually in London. (Applause.) The next would be opened on May 31. The committee believed that a large number of medical men in London never went, and could not possibly get to the B.M.A. meetings in the provinces, and the London exhibition would meet their desires to see all that was new. He mentioned also that the Association numbers fifty members, who pay 5s. annually, but after December 31 the subscription is to be made 10s. 6d. and a guinea charged as entrance-fee. Mr. Norris replied on behalf of non-exhibitors, and recalled the fact that the Association was originally suggested by the late Mr. S. M. Burroughs at the Bristol meeting of the B.M.A. Mr. Voigt, giving "The President and Officers," said that Mr. Weiss's plan of the hall was worthy of a skilled architect, Mr. Rebman had the interests of the members entirely at heart, and Mr. Blau's efforts were marvellous, indeed prodigious, unlike himself, for he was the personification of the old proverb "Little and Good." The President formally acknowledged the toast, leaving the Treasurer and Secretary to reply. Mr. Rebman let cold figures show the success of 1896-97. The Association began the year with 10l. 4s. 11d., which was a promising sum to start an exhibition on. From the latter they drew 894l. 4s. 3d., and after all expenses were paid they had 164l. 14s. 5d. in hand. Four pounds had yet to come in. The guarantee-fund had not been drawn upon. Mr. Blau also spoke, and kept his audience laughing for five minutes by his inimitable and quaint account of his secretarial duties. Other toasts followed, "The Visitors" falling upon Dr. Maw, who spoke so quietly that most of the audience accepted seriously his statement that he had gone to Darwin's "Origin of Species" for inspiration. The musical entertainment was excellent.

STUDENTS DINE.

Last Saturday evening the fourth annual dinner of the Metropolitan College of Pharmacy was held in the Venetian Chamber of the Holborn Restaurant, Mr. Thos. Tyrer, F.I.C., F.C.S., presiding. The company numbered nearly 200, and the proceedings throughout were of the heartiest character. Mr. Tyrer, in giving the toast of "The Metropolitan College of Pharmacy," said: The law demands that you should be intelligent, and that is why you go to the Metropolitan College of Pharmacy. There is an increasing demand for intelligent service, but if there is any calling which requires care and intelligence, it is that of the chemist and druggist. (Hear, hear.) Where would be the physician, who knows so little pharmacy, without you? (Laughter.) The law demands your qualification. It has drawn up a schedule of poisons, because there were many persons, and there are still, who handled poisons so carelessly that the law put the care of them in your hands. It requires of you that you shall keep them carefully and deal them out intelligently. That is why a college of pharmacy has become a necessity—it is needful to improve your intelligence, and do not forget that it also helps you to get your living. The condition of pharmacy is unsatisfactory, and will be so until it is regarded more professionally—(applause)—and regarded less as a cross between shopkeeping and a profession. I was painfully shocked the other day to notice through the fog in a district of London a sign, in white letters 5 or 6 inches long, which read "Reducers of chemists' prices"—not "reduced prices"; and I say that is wrong. (Applause.) There may be a gentleman present who is an assistant in such a place: I am sorry for him. (Laughter.) The cheap and nasty won't do in medicine. (Applause.) Why, here is a list of those who have qualified from this college during the past year, and there is a note at the bottom: "The above constitute one-third of those who passed the Minor in 1896-97." One-third of all who qualified were from your college. (Applause.) Are these cheap and nasty? (Laughter.) Do you, Mr. Will, educate them at reduced prices? (Laughter and applause.) Mr. Tyrer then referred to the cutting controversy, and defended the increased standard of the examination, because it is "infinitely better that the standard should be raised in order to make the business a profession, and (he believed) the higher the better." But he would at the same time give the British pharmacist the protection and profit which are by law secured to the

German apotheker. With some pleasant references to chemists' assistants, Mr. Tyrer concluded his speech, wishing Mr. Watson Will, the principal, "many happy returns of the day" and continued prosperity to his college.

Mr. Will, in reply, said that the past year had been a record year at the college. The fact that every third man who passed the Minor went through his college was alone flattering. (Hear, hear.) He acknowledged the assistance he had received from his demonstrators, regretted that Mr. Burgin was leaving, and intimated that Mr. de Morgan, F.C.S., Carter Gold Medallist in Botany at King's College, was to succeed him. Referring to examinations, Mr. Will said that he largely agreed with what had fallen from the Chairman. Examination was a hall-mark, but not an end. Some of the best men were the greatest duffers at examinations.

The Chairman then presented the medals and certificates. A silver medal is awarded each session to the student who takes the highest aggregate of marks in five subjects, and bronze medals to the highest in each subject. The following were the medallists:—

WINTER SESSION.

William Priestman, silver.

W. C. Pickering (Norwich), bronze for chemistry, botany, pharmacognosy, and pharmacy.

H. T. Parker (Cambridge), bronze for dispensing.

SPRING SESSION.

William Lowson, silver.

E. H. Bowdler, bronze for pharmacognosy and pharmacy.

F. Blackmore (Weston-super-Mare), bronze for chemistry.

E. Marsh (Weston-super-Mare), bronze for botany.

H. Jenkins (Brighton), bronze for dispensing.

SUMMER SESSION.

W. H. H. Bolitho, silver.

L. Stearn (Ilfracombe), bronze for chemistry.

G. Fairweather (Plymouth), bronze for botany.

A. E. Marriott (Leamington), bronze for pharmacognosy.

A. J. Hickling (Market Harborough), bronze for pharmacy.

E. B. Ward, bronze for dispensing.

When proposing the demonstrators, Mr. J. Gouldbourne, who spoke well, presented Mr. Burgin, in the name of the students, with a dressing-bag and box of cigars. After other toasts, and a most enjoyable programme of music, Mr. Patrick Gardiner gave the Chairman's health, which was heartily drunk; and when Mr. Tyrer replied, the company sang "Auld Lang Syne" as near like the proper thing as was possible in such an assemblage.

LIVERPOOL SONGSTERS.

The members of the Chemists' Association held an enjoyable smoking-concert at the Alexandra Hotel on Tuesday evening. Mr. A. O. Abraham presided, and, thanks to arrangements made by Mr. Theo. H. Wardleworth, the capital musical entertainment was given by the following gentlemen:—Messrs. John Bain, F. Smith, W. J. Stone, C. Biene, R. Field, F. Smith, S. L. Austin, J. Shacklady, F. L. Beckett, and Mr. Frank Lott acted as accompanist.

LEICESTER CHEMISTS' SOCIAL UNION.

A smoking-concert was held at Wyvern Hotel on November 30; about seventy were present, and Mr. W. B. Clark presided, in the absence of Mr. Howard Lloyd, through illness. Mr. Clark opened with an admirable speech on the bearing and effect of *bona fide* amusement on business life. The excellent programme was a big success, thanks to the efforts of the Hon. Sec., Mr. Goodess.

AN ABERDEEN DANCE.

A Cinderella-dance was held under the auspices of the Aberdeen Junior Chemists' Association in the Bon Accord Hotel, Market Street, on Thursday, November 25. The M.C.'s were Messrs. Milne and Murray. Dancing commenced at 8.30. Over thirty couples were present, and a most enjoyable evening was spent.

"How much do these scales weigh?" he inquired of the new assistant. "I—I don't know, sir," answered that gentleman, "but if you will wait one minute I'll weigh them and tell you."

Legal Reports.

MR. JUSTICE WILLS ON THE PINK-PILL CASE.

IN charging the Grand Jury at the Lincolnshire Assizes at Lincoln, on November 25, Mr. Justice Wills referred to the case in which a man named Henry Downs (39), described as a herbalist, had been committed for trial by the Louth Magistrates for obtaining 6*d.* each from two persons with intent to cheat. The false pretence alleged was that the prisoner and another person unknown were agents for advertising Dr. Williams' Company, and that the pills sold by him were Dr. Williams' pink pills. His Lordship said it might be that the purchasers had been defrauded, but he was not sure that it was not an advertisement. He should advise them just to think that that was possible, and especially so as he found there were three charges. As to one of them it was merely in technical order, but as to another of them he found that the allegation that these were somebody's pills was only made a quarter of an hour after the purchase had been effected, and it could not have had much to do with procuring the purchase and tempting the sixpence out of the purchaser's pocket; and the third case had something of the same element in it. The whole thing raised suspicion in his mind. Of course if the man had been going about the country defrauding people of their sixpences, he ought to be brought to book for it. On the other hand, he would like to know very much, if he had to deal with it, whose prosecution it was, and whether the pink pills themselves were at the bottom of it or no. They were entitled to protection the same as anyone else, and the proprietor might put the criminal law into operation. He disclaimed having formed any definite opinion that it was so, but he must say it was a thing he would rather like to ascertain if he had to deal with it. If it turned out that that was the case, he did not think it mattered what the evidence was—the result, he thought, might be foreseen.

Later in the day the foreman of the Grand Jury intimated to his Lordship that they had discharged all the bills except that relating to the man Downs. They had called for the witnesses, and none appeared. His Lordship (Mr. Justice Wills): Then there is only one thing you have to do—that is, to throw out the bill. If there are no witnesses, it will not prevent a prosecution in future if anybody wants to proceed, but I do not think it is likely. The Grand Jury then threw out the bill.

THE SACCHARIN CORPORATION v. HAINES, WARD & CO.

IN the Chancery Division on Friday last, before Mr. Justice North, Mr. Swinfen Eady, Q.C., mentioned the case of the Saccharin Corporation v. Haines, Ward & Co., in which there was a motion for an injunction to restrain the infringement of plaintiffs' patents for the manufacture of saccharin. Counsel said the defendants had now given an undertaking in the terms of the notice of motion until trial or further order, without prejudice, and on a cross undertaking by plaintiffs with regard to damages.

THE BADISCHE ANILIN APPEAL.

IN the House of Lords, on November 26, before the Lord Chancellor, Lords Herschell, Macnaghten, Morris, Shand, and Davey, the appeal of the Badische Anilin- und Soda-Fabrik v. the Basle Chemical-works, Bindischiedler, came on for hearing. The action was brought by the appellants for an injunction to restrain the defendants from importing or bringing into England, and from manufacturing or selling in England, certain dyes or colouring-matters made according to the plaintiffs' patent for certain orange-colouring matters from dioxytartaric (carboxytaronic) acid, known in the market under the name "Tartrazine." The respondents are chemical-manufacturers in Basle, and it is alleged that for some time past they have supplied persons in this country with this dye, under the name of "Fast Yellow T." Amongst others they supplied a parcel of such dye to Henry Johnson, who was at first a co-defendant. Henry Johnson offered to give an undertaking not to sell the dye in future

or to infringe the appellants' patent, and to submit to an order for an account of profits or damages and to pay costs and an agreed sum for damages. The respondents did not deny the validity of the patent, but pleaded that they were Swiss subjects and had no place of business or residence in England, and denied that they were subject in any way to the jurisdiction of the Court. They refused to plead that their dye was not made in accordance with the appellants' invention, and the case, both before Mr. Justice North and the Court of Appeal, proceeded upon the assumption that the patent was valid, and that the dye supplied by the respondents to H. Johnson & Co. was made according to the process comprised in the patent. Mr. Justice North granted an injunction, which, however, the Court of Appeal, by a majority of two Lords Justices to one, dissented from, and dismissed the action with costs. The facts on which the case was argued were that the defendant Johnson sent to the respondents a postcard as follows:—

Please send us "by post," immediately, 5 lbs. yellow T for wool 109.

Yours truly,
(Signed) HENRY JOHNSON & Co.

What is now the lowest price for casks of this colour? Also please quote us your price for Auramine II.

The Basle Chemical-works,
Bindischedler, Basle, Switzerland.

The respondents, according to the appellants, sent the infringing dye to Messrs. Niebergall & Goth, Basle, whom they were accustomed to employ, and they forwarded the parcel by post to H. Johnson & Co. This, the appellants contended, was equivalent to sending the infringing dye into England.

Mr. Moulton now argued before the House of Lords that as the defendant appeared to the writ acknowledging the jurisdiction he had infringed the patent by the mere act of posting in a foreign country the infringing article for transmission to England. The Post Office, he contended, was the agent not only of the consignee but that of the consignor, who had employed it for the purpose of infringing the plaintiffs' patent, and he was responsible for the act of his agent.

Lord Herschell doubted whether the mere carrying of a patent article through a country to a man who was going to use it was an infringement of the patent.

The Lord Chancellor had grave doubts whether it could be said that the defendant had done anything which amounted to making, using, and exercising or vending the invention of the plaintiffs in this country. The patent was confined to this country, and did not extend to Basle, where all the acts done were committed.

Lord Herschell said the only user in this country was sending them from Dover to London.

Mr. Moulton said the defendant was responsible for the transportation and delivery.

The case had not concluded when their Lordships adjourned.

On Tuesday, November 30, after hearing Mr. Moulton, Q.C., and Mr. Cripps, Q.C., for the appellants, and without calling upon Mr. Asquith, Q.C., and Mr. Upjohn, Q.C., for the respondents, their Lordships delivered judgment.

The Lord Chancellor said the whole question depended on the legal character of the carrier. Was he the agent of the seller or of the buyer? It was said that the delivery of goods for posting at Basle and the handing of them over to the recipient in England was one continuous act, part of which was consummated within the jurisdiction. But it was well-settled law that when goods were consigned to a named agent for delivery to a purchaser, the agent became the agent of the purchaser and not of the vendor. The fact that the agent in this case was the Post Office made no difference in the principle. The English Courts had no jurisdiction over the respondents, and consequently the appeal must be dismissed with costs. The other learned Lords concurred.

SALE OF FOOD AND DRUGS ACT,

SALICYLATED QUININE-WINE.

At Swinlon Petty Sessions on November 25 Edward Rogers, grocer, was summoned by the Wilts County Council for selling

a certain orange-quinine wine which contained the proportion of 75 gr. per gallon of salicylic acid. Mr. Bevir, who conducted the prosecution, said they challenged the right of a person to sell wine containing that quantity of salicylic acid without giving notice to the purchaser. He suggested that the salicylic acid was introduced because, in view of the low percentage of alcohol (2.2 per cent.), the wine would not otherwise keep.

On the wrapper round the bottle sold were the words, "This orange-quinine wine has been examined at Somerset House by the Inland Revenue authorities and found by them to contain the proper quantity of pure quinine as ordered by the British Pharmacopœia. Recommended by medical practitioners in all parts of the world as a most grateful and invigorating tonic. Orange-quinine wine contains 2 gr. of pure sulphate of quinine in each wineglassful."

Professor Munro spoke to his analysis of the wine. It contained 2.2 per cent. of alcohol and nearly 20 gr. per pint of sulphate of quinine. There was no complaint that there was any deficiency in quinine as compared with the Pharmacopœia. The preparation had not been made with wine of any kind, and it did not come under any definition known to witness. The salicylic acid in the mixture showed a proportion of not less than 75 gr. per gallon, or nearly 1 gr. per wineglassful. Having regard to the low percentage of alcohol the addition of the acid would have the effect of a preservative. In his opinion the addition would prejudice the purchaser. The artificial salicylic acid—that used in the present case—had been found to contain harmful ingredients. Cross-examined: It was the ordinary medical opinion that salicylic acid depressed, but there was an opinion in some quarters that the perfectly pure acid had not that effect. He believed it possible that the acid in one of the bottles of quinine was harmful, supposing, for instance, it was taken four or five times a day. The deficiency of alcohol was one thing which operated to the prejudice of the purchaser, and the presence of the acid was another. Alcohol was a stimulant, and that was what the purchaser required.

Alfred Wright, pharmaceutical chemist, of Yeovil, with twenty-nine years' experience, said he had himself prepared orange-wine. In that preparation no alcohol was added. He had also made quinine-wine, in the making of which orange-wine was used. He had never used salicylic acid in making either orange or quinine wine; and he had never known it used. There was not the slightest reason for its introduction. He did not know of any preparation known as wine containing as little as 2 per cent. of alcohol. Cross-examined: He agreed that the acid would be added for the purposes of a preservative.

Mr. Withy represented the defendant, and called Dr. F. E. Streeten, who said 4 gr. per oz. of salicylic acid might be described as an almost infinitesimal dose, and he could not imagine its being added for any other purpose than that of a preservative. He was not prepared to say so small a quantity would be harmful. The physiologically pure acid had not the same effects as the old kind, which brought about depression on account of its impurities. Cross-examined: He should not prescribe salicylic acid, pure and simple, as a tonic, but he had often prescribed it in conjunction with quinine. He did not think three wineglassfuls a day of the preparation in question would have a harmful effect on the system. He declined to say whether, after hearing Dr. Munro, the preparation could be described as orange-quinine wine.

Horace Brocklesby, member of the firm of Lorimer & Co. manufacturers of the wine, said they sold 15 000 or 20 000 gallons per annum. They manufactured both this preparation and also the wine according to the British Pharmacopœia formula. The former was undoubtedly more palatable, and was more popular with the public. In preparing this article they added the alcohol, but in the B.P. wine the alcohol was in the wine used. This orange quinine actually cost more for production, but they sold it at a smaller price on account of the demand and competition. Cross-examined: In this orange quinine alcohol was added in the form of soluble essence of orange-peel, and they prepared this themselves with duty-paid alcohol. The orange-quinine wine was invoiced to customers at 8s. a dozen bottles, while the B.P. wine was invoiced at 13s. It might seem remarkable, but it was a fact, that the 8s. article cost con-

siderably more in production than the latter; and he was willing to produce the laboratory books to show that what he said was true. Originally the price was the same, but keen demand and enormous competition had resulted in the price of the orange quinine being again and again reduced. Orange-wine was certainly used in the production of the article.

Mr. Withy, addressing the Bench, said he hoped that, whatever the verdict might be, the Magistrates would come to the conclusion that a *bona-fide* defence had been raised, and that there had been no trick or dodge. He submitted that he was entitled to a verdict on the ground that it was obvious that the purchaser received notice that he was not buying quinine-wine, which was the Pharmacopœia article, but that he was buying a compound. The public knew nothing of the component parts of the articles; they wanted the quinine, and they got it. The manufacturers might even be held up as public benefactors, for they gave to a certain section of the public the quinine without the alcohol, without in any way taking away from the quality of the article. The article was more palatable, and the public liked it better than the Pharmacopœia article. He also asked the Bench to say that the small quantity of acid—and the physiologically pure acid was used—was not sufficient to prove injurious to the health of the purchaser. If they found there was no increased profit, it was a most important factor to prove the absence of fraud, and it had been proved that the compound cost more in production than the pure article. He was fighting nominally for Mr. Rogers, but really for Lorimer & Co., who had carried on business for twenty or thirty years, and had shown no hesitation in coming into court in the present case.

Mr. Bevir, in reply, contended that the label gave the purchaser notice that he was receiving a preparation of orange-wine and quinine and not salicylic acid. He suggested that the acid had been added because of the absence from the preparation of an ingredient which should have been included. It struck one as most incredible that a bottle of wine which cost more to produce than another should be sold at half the price; but of course they had the word of the firm's representative to that effect.

The Bench had no hesitation in convicting, and imposed a fine of 20s. and taxed costs.

Mr. Withy said he might wish to take the case further, and the Bench consented to postpone the entry of judgment for a week.

[In reply to an inquiry made on our behalf Messrs. Lorimer & Co. inform us that the statement that their orange-quinine wine cost them more to manufacture than their quinine-wine B.P. is perfectly true. "But," said Mr. Lorimer, "you must remember that we put our name on the latter and spend a great deal of money advertising it." Mr. Lorimer added that the orange-quinine wine (the article respecting which the action was brought) was first complained of legally last summer, and that since August 1 they had stopped selling it. He showed our representative circulars which his firm had sent out on August 15 to their customers, and said they had, he believed, now taken back and exchanged all the bottles of the preparation which were in vendors' stocks. If not they are quite willing to do so. "We make the article now exactly B.P., and the result to us will be that we shall save 500% a year." We understand that for the future the orange-quinine wine bearing customers' name will be listed as A (advertised as No. 2 as formerly) and the quinine-wine (Lorimer) as B.]

INACCURATE DISPENSING.

At the Lambeth Police Court on November 25, William Mercer, of Electric Avenue, Brixton, was summoned by the Lambeth Vestry for selling to the prejudice of the purchaser a drug—viz., iodide of potassium—not of the nature, substance, and quality of the article demanded by the purchaser. Mr. T. Lightfoot, an inspector under the Food and Drugs Act, said he went on November 5 to a chemist's shop in Electric Avenue, kept by Messrs. Parke, and asked to have a prescription made up. He gave it to the defendant, who was serving behind the counter, and he made it up. When told the article supplied would be analysed, the defendant said he had used a solution, and added that if witnesses would give it him back he would give him the proper stuff.

The certificate of the public analyst showed that the quantity of iodide of potassium supplied consisted of 46 gr. instead of 60 gr., as required by the prescription. Counsel for the defence argued that this was only a trumpety matter, and said the deficiency of 14 gr. was only equal to 23 drops of the solution used. For the defence Mr. Joseph Gibson, a chemist, said the iodide of potassium was kept dissolved 1 part in 2 for convenience. If they were busy it was much easier to measure the potassium in solution than to weigh it. In order to supply 1 dr. (60 gr.) 2 dr. of solution would be given. An assistant might easily give 28 drops short in measuring out the quantity. Mr. Hopkins remarked that possibly a great deal might be said in mitigation in this particular case, but one must recognise how important it was that a doctor should be able to rely upon his patients getting the exact strength of medicine he ordered. The defendant would be fined 40s. and costs.

COD-LIVER OIL SPECULATIONS.

THE action of Bevan and others v. Kumpff & Eckenstein and others, which was the result of a disagreement between speculators who, in April, 1895, had entered into an agreement to buy large quantities of cod-liver oil, with the result of losing a considerable amount of money, was reported by us in August last. The defendants denied their liability, alleging that material facts had been concealed. The jury found that this was not so, and judgment was given for the plaintiffs. The defendants (except one, Heald, who had discharged his share of liability) applied for a new trial principally on the ground that the verdict was against the weight of evidence. The case has been before the Court of Appeal on November 25 and December 2, and is still unfinished.

ALCOHOLIC TEMPERANCE-DRINKS.

ACTIONS were brought last week at Ashburton Petty Sessions by the Excise against Thomas Williams, of Brixham, and James H. Stancombe, of Ashburton, for selling "Cydrina" and "Symonia" without licences. In the first case Mr. J. H. Robins, from the Government Laboratory, stated that the cydrina contained 310 per cent. of alcohol, and the symonia 410 per cent. of alcohol. Defendant produced a printed notice describing the liquors as non-alcoholic. Mr. Geo. Symons, of the firm of Messrs. Symons & Co., the manufacturers of the liquors, stated that when it was made in May last it contained from 1.3 to 1.8 per cent. of alcohol, and since then it might have generated more alcohol. Defendant was fined 2*l.* 12*s.*, including costs, the Bench informing him that he had a good action against the firm who supplied him. In the case against Stancombe, cydrina was purchased and was found to contain between 3 and 4 per cent. of proof spirit. This defendant was fined 1*s.*, with 1*l.* 1*s.* analyst's fee, and 9*s.* 6*d.* costs.

PAYING FOR ADVERTISEMENTS WITH GOODS.

IN the House of Lords, on December 2, judgment was given in an appeal by The Mercantile Agency Company v. Flitwick, Chalybeate Company. The appellants claimed for non-delivery of goods pursuant to a written contract by which the respondents agreed to pay for certain advertising space in the "Colonial Buyers' Guide," by goods at lowest price and best discounts. The advertisements were inserted, but the defendants refused to deliver goods except with a label attached "for export only." They alleged that they were induced to enter into the agreement by an express representation made by the plaintiffs' representative, that the appellants only carried on an export business, and that the waters would be exported. The contract expressly stipulated that no conditions would be recognised except those on the order. But the jury, on the direction of Mr. Justice Grantham that there could be a collateral agreement, had found for the defendants, and the Court of Appeal had confirmed Mr. Justice Grantham's judgment, but the House of Lords (the Lord Chancellor, Lords Watson, Herschel, Morris, Shand, and Davey) unanimously reversed this judgment, holding that the written contract could not be modified—at all events, not without the express consent of the plaintiffs.

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Pure LIQUORICE	10/ lb.	Best Pure ARROWROOT	9/ lb. in tins.

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OR

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"IT IS A BAD COAT THAT WILL NOT BEAR BRUSHING."

But your Tinctures will stand any test if they are made with

Fletcher's Concentrated Liquors.

Editorial • (Illustration of a lighthouse) • Comments

THE NEW PHARMACY BILL.

THE Council of the Pharmaceutical Society have resolved, with that deadly unanimity which characterises all their proceedings nowadays, to launch a new Bill on the Parliamentary ocean next Session. Time was when such a proposition would have commanded at least a thorough debate, but that period is hardly within the recollection of the present generation of pharmacists. If there is any difference of opinion among the Bloomsbury councillors, it is never allowed to appear on the monthly show-day. Difficult members are always squared by some unrevealed process in the committee-rooms, and the "united front" so warmly advocated is secured at least in appearance. The policy may have its advantage from some points of view, but it detracts from the reputation of the Council as a representative body, which years ago it was supposed to be. It must be years

since anyone turned to the reports of the Council proceedings for any light on the questions which from time to time agitate pharmacy.

The proposed Bill is printed in our report of the Council's proceedings. There are faithful members scattered up and down the country who may be depended on to greet it as the highest expression of pharmaceutical wisdom. That is the attitude which modern loyalty requires from those who hope to rise in the estimation of Bloomsbury eminences. But it is difficult to picture the most obedient devotee waxing enthusiastic over it. Even its apologists have to confess that its purpose is in direct opposition to their opinions of a few years ago. The Bill is a copy, with trifling alterations, of the one drafted by the Council in 1894. The differences are that youths who pass the first examination are to be entitled, if they choose to pay for it, to acquire the title of "student-associate" of the Society, and not "associate" as was then proposed, and that the Minor men are to be entitled to all the seats on the Council if they can get them, and are not to be limited to ten, as was agreed to after a contest at the annual meeting in 1894.

The main purpose of the Bill is, of course, to render Minor men eligible to be members of the Society, and not merely associates as they are now. Those who have adopted the oft-reiterated advice to go on for the Major have some reason to complain, but we do not know that anyone else has. The alterations aimed at are variations in the constitution of the Society, and Parliament can hardly be expected to take much interest in such an affair. Given a few lucky chances, and no opposition, the Bill may get through; and who will be the better for it? Bloomsbury Square will get a few more guineas, but there cannot be any reasonable pretence that either the trade or the public will benefit. It is hinted that the trade-advantages are to come afterwards, when the Society is "consolidated," to use the cant phrase. This is a pious delusion. It is guineas, and guineas alone, that Bloomsbury Square wants, and the Society will be no more fit to secure legislative benefits when this scheme has been authorised than it is without such sanction. The most sanguine member of the Council can hardly imagine that the bait will bring in a thousand new members. But suppose it did; would it make any of the claims which chemists from time to time put forward one atom more just? And can anyone imagine that a thousand more members in the Pharmaceutical Society would tend to frighten the House of Commons or the Government?

Our friends of the provincial associations who have been discussing this and cognate proposals must surely feel that they have been to some extent sold. The chemists of Plymouth, of Glasgow, of Birmingham, of Manchester, of Sheffield, and of Nottingham got the idea in their heads that they were asked to make suggestions for a new Pharmacy Bill. And we have reported their solemn discussions week after week. Their advice was not wanted at all; the President as good as told them so at several dinners which he attended. What they were asked to do was to take their coats off and go it blind for whatever the Council might see fit to propose. They will, no doubt, accept the humiliation and admit that the student-associateship and its associates are all that is wanted.

Are chemists serious? Do they go to their meetings simply for the sake of talking? We have heard from end to end of the country of the injustice which they suffer, of this, that, and the other grievance, and yet when their representative body resolves to go to Parliament it is implicitly announced that there is nothing urgently wanted except a few trifling re-arrangements of the Society's affairs. We do not blame the Society for doing the best it can for itself. If

"student associate" will fetch half a guinea, while "student will not, why not adopt it"? But do not let the Council pose as benefactors to the trade nor even as its representatives. They were told plainly by the committee that considered the improvement of company law that their particular grievance ought to be remedied by a special Pharmacy Act. They have been urged again and again by chemists to try for exemption from jury-service for them. They have more than once themselves expressed a claim to the same statutory rights in regard to the compounding of medicinal prescriptions as Irish pharmacists have; and yet they now propose to go to Parliament and say nothing of any of these things. It can hardly be admitted that they feel very warmly about any of them.

THE BOOK OF THE WEEK.

WE may be pardoned for saying that it is *THE CHEMISTS' AND DRUGGISTS' DIARY* for 1898. Our binders have been busy despatching them during the past eight days to all our subscribers, as notified on page 857. Last year we increased the size of the *DIARY* considerably, making it uniform in size with *THE CHEMIST AND DRUGGIST*. There is no alteration of importance this year—at least, such as subscribers are likely to note. Nevertheless, several new ideas have been carried out. For example, by extending the number and length of the pink pages, and using a smaller but readable type, at least half as much more useful information has been got into the *DIARY* than before. On looking at the edge of the book, two bands of pink are observed in a white field; these are the first two sections of the literary contributions. Then comes a thick band of pink; this is the ruled writing-paper with pink blotting-paper between. Next we have a band of pink similar to the two in front, and this makes the third section of the literary contributions. The field of white consists of business-announcements—the advertisements of 561 firms, agents, merchants, and manufacturers of every conceivable requisite for the varied needs of the drug-trade. Before the *DIARY* reaches the binders' hands we have an excellent opportunity of judging the value of these advertisements to the trade, while we compile the index beginning on page 195, and entitled "The Buyers' Guide." This guide contains the name of every article advertised in the *DIARY*, also every brand and speciality. One has but to turn to the word "Soap" to see what this means, and there he will find some two hundred entries, and almost as many kinds of soap specified, because every maker who advertises in the *DIARY*—and the best do—names his leading or popular brands. No retailer that we know of keeps two hundred kinds of soaps, so that in the course of the year, when an unstocked soap is asked for and its origin is unknown, it will be safe to turn to this "Buyers' Guide" for reference. So with any other article; it is always safe to turn up the *DIARY* when in doubt. We regard it to be of as vital importance for the chemist to know where a thing can be obtained in trade as to know how it is provided by art or nature. It is interesting to know that ceresin comes from Galicia, but more important for the trader to know where he can buy it. And that is where such a well-supported publication as *THE CHEMISTS' AND DRUGGISTS' DIARY* comes in.

Another fact which the compilation or examination of the "Buyers' Guide" brings home to one is the enormous number and variety of articles which the drug-trade handles. There are not fewer than ten thousand entries in the "Guide," and, allowing for cross references and multiples, it will be safe to say that three thousand articles are diversified. Many of these are recent additions to the stock, and

some are not universally stocked. We may instance photographic goods, milk-sterilisers, humanised milk, and similar products, a large number of invalids' foods, liquid carbonic-acid capsules for making aerated water, and a variety of specialties and raw products. There are thus presented to smart business men, who appreciate the necessity of continually keeping abreast of the times, opportunities for increasing returns which should be taken advantage of promptly. The enterprise of the advertisers deserves emulation. Most of them have taken pains to give a fair show to their goods, and we carry their messages to all civilised parts of the earth. So we with confidence ask business men everywhere to harrow the "white field" in view of the crop of new business which may come to them.

Turning once more to the pink bands, it will be observed that all legal advice is grouped together in a section beginning page 210*, and this is followed by a revised list of London hospitals. The second pink band begins on page 247, with the calendars for 1893 and 1899, and on nine pages after these are groups of official information, such as postal and telegraphic, Excise and Inland Revenue, and Customs. The next important section deals with societies of all kinds related to, or connected with, the drug-trade. The special treatise entitled "The Art of Pharmacy" begins on page 263, and is continued on page 475, the whole comprising forty-four pages of original monographs by pharmacists who write from practical knowledge. A directory of London medical and surgical specialists, and some other useful matters complete the work. As our correspondence becomes week by week more comprehensive and voluminous, owing to repeated questions about the same things, we would point out that we have taken pains to include in the DIARY information on those subjects which chemists are so often in difficulty about; and it will be found a time-saving plan to refer to the index, on page 6, before writing to us in regard to the sale of poisons, the registration of trade-marks, and things of that kind. Finally, we call attention to the announcement on another page in this issue regarding the coupon-postcard inserted in each DIARY, which entitles to participate in a competition for ten guineas in prizes.

CANARY-SEED.

THE first shipment of the new crop of Turkish canary-seed having recently arrived, this may be considered a convenient time to review the position of the market. The price at present is the lowest of the last seven years at this season, as will be seen from the following quotations:—

1891	1892	1893	1894	1895	1896	1897
40s.	75s.	39s.	49s.	32s. 6d.	27s. 6d.	25s. 6d.

The cause for the decline in price is not far to seek. It is owing simply to the crops for the last three years being considerably above the average. No statistics upon which one can rely are obtainable; but where 130,000 bags would be regarded as about an average crop, the production has varied lately from 170,000 to 230,000 bags a year. Canary-seed is a favourite article of speculation, owing to the vicissitudes which attend its growth, but the fall in price having been almost continuous, speculators have been gradually getting out of their holdings and are leaving the article to the regular traders. This, of course, has further depressed the price, which is now probably below what is justified by the law of supply and demand. For, although Turkey is the principal factor as regards the production, there are other countries which grow the seed, such as Morocco, Spain, Holland, and the River Plate. These have been beaten out of the field with the exception of Morocco and Spain, and in them it is only fine qualities, which do not compete with Turkish seed

(the average market standard), that are grown to any extent. But there is little prospect of an appreciable rise in price until the sowings in Turkey are considerably reduced, or a bad season causes a short crop.

The quality of the new crop of Turkish seed is very disappointing. It has a mildewed appearance, which is the result of heavy rains in the early autumn, and the grains are thin and small. The crop at one time was estimated to produce 250,000 bags, but when the threshing began it was seen that the result would be nearer 170,000 bags. Holders of old seed of good quality may, perhaps, endeavour to get a premium on their stock when they realise the position, but buyers of canary-seed have had their own way so much of late that it will be a hard matter to convince them that there is a real difference in value.

Spanish and the finer qualities of Morocco seed are comparatively scarce, and command high prices. Fine Spanish is worth 40s. to 45s. per qr.; good, 37s. to 39s.; good to fine Morocco, 30s. to 34s. per qr.

THE PHARMACEUTICAL COUNCIL.

Our remarks in regard to the constitution of the Pharmaceutical Council have gone home; but councillors who speak about it are unable to think of any method by which retirement could be enforced. This is astonishing and comic, because the same councillors found a way for making examiners take a year's rest at the end of a term of office.

THE "DIARY" COUPON.

May we ask subscribers to pay prompt attention to the coupon inserted with the DIARY? It is an easy competition this year and should be very popular. If a subscriber does not want the guineas himself, we ask him to let his assistant or apprentice have a chance. We should like all the coupons used; and no one will be the worse for the exercise, for it will certainly give him some new trade ideas.

SCOTCH EXAMINERS.

There is much to be said in favour of Mr. J. Anderson Russell's objection to nominating members of the North British Branch of the Executive as examiners. There is no rule against the course, but under the Society's by-laws no member of Council is eligible for election as an examiner. The Scotch Executive not being the Council, nor a committee of the Council, nor a constitutional part of the Society, may rightly say that the by-law does not apply to what is done in Edinburgh; but we venture to say that a recognition of the spirit of the by-law would be universally applauded in the Society. This note is not intended to reflect in the slightest upon the members of the Executive who were elected on Wednesday; it is simply a comment upon a principle which deserves consideration.

JURY-SERVICE.

The demand for relief from jury-service on the part of chemists and druggists is generally based on the fact that pharmaceutical chemists are (by the Juries Act, not by the Pharmacy Act) so exempted. Most of those who discuss the matter are either ignorant of or forget the fact that pharmaceutical chemists in Scotland are not exempted, and it is curious that we never hear Scotch pharmacists complaining about the matter. If there were coroners' inquests in Scotland, perhaps we might hear more from that quarter. An attempt was once made in the late John Mackay's time to get the English privilege extended to Scotland, and the Lord Advocate of the day, who had charge of a Bill dealing with juries, received a deputation of Edinburgh pharmacists, who pleaded their case so well that the Lord Advocate pleasantly replied, "No, I won't exempt chemists, one of the most in-

telligent class in the community. Why, the manner in which you have pleaded your case convinces me that you are the very people to make excellent jurymen." The deputation retired smiling. After all, is jury-service such a serious business to chemists? We fancy that Dickens is responsible for most of the outcry about it—but we are open to conviction.

THE GOVERNMENT AND EARLY CLOSING.

The influential deputation which Sir John Lubbock introduced to the Home Secretary on Wednesday, and which consisted of delegates representing associations of traders from all parts of the United Kingdom, met with a very discouraging reception. Sir M. W. Ridley flatly declined to assist the object which Sir John Lubbock has so patiently and persistently pursued. The Home Secretary, in his forcible reply to the appeal, pointed out that there was no other legislation in this country interfering with adult labour, and he argued that such an interference as was suggested might become a dangerous precedent. This is, of course, the one serious objection to the measure, but it is by no means certain that it ought to be a fatal one. We are all interfered with in our individual liberties in scores of directions for the general welfare, and a great many able men who have studied this matter have become convinced that only by a little coercion can the object sought be obtained. If the Act were passed, and many prosecutions were needed, it would necessarily break down by itself; but the anticipation of its promoters is that once in operation it would be so universally adopted as to be hardly recognised as a police measure. When Sir M. W. Ridley declares that no large majority of Englishmen need be beaten by the opposition of one or two persons, he talks nonsense, which possibly the Secretary for the Colonies will correct him on when he lays before his colleagues, as he promised to do, a full statement of the arguments submitted to him.

RAIN-TREE PODS.

We noticed last week in a London drug-broker's rooms a sample of dried brown pods which seemed to be unknown to the frequenters of Mincing Lane. They had been sent from South America to a firm of London merchants in order to see whether they had any commercial value. We have ascertained that they are the pods of the "Guango" or "Rain Tree" (*Pithecolobium Saman*). This tree resembles English oak in habit, being lofty and spreading. When the pods are ripe they are of a bright colour, and contain a sugary, amber-coloured pulp. In size they are from 6 to 10 inches long, nearly 1 inch wide and about $\frac{1}{4}$ inch thick. They are produced in abundance, and are said to form an excellent food for cattle, but are not known to possess any medicinal properties, though allied species are employed in Brazil as astringents. The tree is called 'rain tree' on account of its distilling moisture to such an extent as to wet the ground beneath it. This effect is described by Spruce as being caused by multitudes of cicades sucking the juices of the tender young branches and leaves, and squirting forth slender streams of limpid fluid.

CARBOLIC ACID POISONINGS.

The Privy Council's pet is more rampant than ever. We could have collected a dozen cases of poisoning by it from last week's records, but there seems no purpose in repeating the monotonous story unless we could make sure of compelling the Duke of Devonshire to read the list. There were three suicides by carbolic acid in the city of Rochester alone last week. At Hoxton an inquest was held on a woman, the wife of a clerk, who inadvertently took carbolic acid instead of chemical food. In and about Liverpool suicides with carbolic acid proceed with persistent regularity, three or four a week being the average. A government which boldly risks its existence on a muzzling order, and dare not tackle this much more serious matter, is a mystery.

THE JUDGE AND THE PATENT-MEDICINE ADVERTISER.

The remarks of Mr. Justice Wills in the Pink Pills case, in charging the Grand Jury at Lincoln, furnish an interesting study of the working of a highly-educated mind in regard to patent-medicine advertisements. The allegation to be investigated was that the prisoner had sold pills in Louth Market, declaring them to be Dr. Williams' Pink Pills, at about one-fifth of the price of the genuine. It was given in evidence at Louth that the prisoner represented himself to be a travelling agent for Dr. Williams' Pink Pills. This statement was very definitely denied by the prisoner, who asserted that it was a friend of his not in custody who made the speech about the pills, and maintained that neither of them represented the pills to be Dr. Williams's. Mr. Justice Wills suggested to the Grand Jury the possibility of this prosecution being an advertisement. The Pink Pills people, he said, were entitled to protection the same as any; one else, and if the prisoner had been going about the country defrauding people of their sippences he ought to be brought to book for it. His Lordship disclaimed having formed any definite opinion, but he certainly conveyed to the jury an impression that these large advertisers were somewhat dangerous people, and might in this case be working some deep-laid scheme. Mr. Fulford, the proprietor of the medicine in question, happens to be in London at present, and a CHEMIST AND DRUGGIST representative asked him for his opinion of Mr. Justice Wills's observations. Mr. Fulford read the reports, and quietly remarked, "If this is His Lordship's idea of advertising, I should not like him to be spending my money." The idea that men can be bought to risk the heavy penalties of the criminal law, or that, if such persons are obtainable, it would be worth the while of any advertisers to employ them, is one that, it seems to us, should never have been suggested from the Bench. Whether this man was guilty or not we have no means of judging; but from what Mr. Fulford and his advertising manager told us, there is no doubt a good deal of fraudulent sale of pills represented as Dr. Williams's going on, and this is what the firm have a perfect right to prosecute. In the course of conversation, Mr. Fulford mentioned to our representative that during the current year he expects to circulate all over the world not fewer than seventy-five million pamphlets, in some twenty languages. This is one of the biggest feats of advertising we have yet heard of. Can anyone go a million or two better?

Nitrates in Potable Waters.

By JOHN C. THRESH, M.D., D.Sc., &c.

THERE has been a tendency with analysts to take one or other of the extreme views with reference to the significance of nitrates in drinking-waters. Either they have held that the estimation of the nitrates was of no importance or that the amount of nitrates was one of the most important factors in determining the purity of a water. My position is this—that the amount of nitrates which would be of special significance in waters from certain sources has comparatively little significance in a water from other sources. Mr. Dott appears to doubt whether a water can be good—by which I suppose he means safe—if it contains 16 parts per million (equal to 1.1 gr. per gal.) of nitric nitrogen. One would naturally examine the source of such a water very carefully before certifying that it could be used with safety, but that such waters may be perfectly safe I have not the slightest doubt. I have had to adopt this view as the result of a pretty varied and extensive experience, not only in the chemical and bacteriological examination of waters from most diverse sources, but also from the actual survey of the surroundings of the sources from which the waters were derived, and the evidence furnished by the sickness and mortality statistics of the communities using them. Water-

borne diseases are not conveyed by nitrates or chlorides or by any other constituent which the chemist estimates, but by bacteria—living organisms inconceivably minute, yet capable of being removed even by filtration through a few feet of fine sand, and even more effectually by percolation through sufficient subsoil. Most subsoils which contain water can be made to yield that water in a high condition of bacteriological purity if the source is carefully selected and the method of collection satisfactory. A few years ago I should have had as holy a horror of a water containing 1 gr. of nitric nitrogen per gal. as has Mr. Dott, but the evidence of experience has broadened my views. It may be remembered that the Royal Commission on Metropolitan Water-supply, after hearing all the evidence of chemical and bacteriological experts—evidence, unfortunately, of a most conflicting character—had to fall back upon this “evidence of experience” and take the common-sense view that the danger to the largest city in the world could not be great, inasmuch as for a very long period it had also been the healthiest of all the great cities in the world. This, of course, had reference to the use of Thames water, which contains but little nitrates, and it is quoted merely to show that, where diametrically opposed views are held, there is good authority for falling back upon the evidence of experience.

Whilst this nitrate question is under discussion I should like to direct attention to the necessity for more careful work in determining the nitric nitrogen in a water. From time to time I have had to compare analyses made by different chemists of the same sample of water, and I find that, whilst in other respects reasonably concordant, the nitric-nitrogen determinations often differ widely. Almost invariably under such circumstances I find the highest figures most nearly correct. There are many different processes for estimating the amount of nitrates in a water, but the reduction of the nitric acid to ammonia is the one usually adopted. When carefully performed this gives the most reliable results, but if the copper-zinc couple is not active, or the reaction is not given time to complete, the results are too low.

For comparison with Mr. Dott's table I give below the results of the analyses of two batches of waters which I have just examined, together with my opinions thereon, based (1) on my examination of the wells from which the water was taken, and (2) the analytical results.

1-3 are wells 300 feet deep, 4-10 shallow wells in porous subsoil.

No	Free Ammonia	Organic Ammonia	Nitric Nitrogen	Chlorine	
1	·68	·03	1·05	509	Quite safe
2	·40	·02	·71	506	Liable to pollution, and therefore unsafe
3	·40	·05	·	531	Impure. There is some dead animal in the well (a rat or mole). Water contains hairs and a small bone
4	·00	·005	14·	33	Dangerously liable to pollution. Caused an outbreak of typhoid fever
5	·00	·03	8·6	23	Quite safe
6	·01	·06	20·	50	Bacteriologically unsatisfactory. When examining the source of the public supply I found a large dead well, receiving sewage, within 30 ft. of the collecting reservoirs. Another, equally near, has since been found
7	·00	·10	14·	70	Quite safe. No possibility of dangerous pollution
8	·56	·40	31·	174	Dangerously polluted
9	·00	·06	13·	26	Quite safe
10	·00	·05	15·	27	Quite safe; being adapted for a public supply

Trade Notes.

IN the Christmas offer advertised last week by Messrs. Edwards & Co., of Holborn, the quantity of Edwards's Harlene to be bought to secure the special discount was accidentally dropped out in printing. It should have appeared as 5*l.* worth.

MESSRS. ROTHSCCHILD & BAKER, of Birmingham, will open a show of their mail-carts, trade cycles, and other manufactures at the Holborn Viaduct Hotel, London, on December 6. The exhibition will remain open until December 11, from 10 A.M. to 6 P.M. each day.

MESSRS. A. E. WHITTON & Co., 48 Shortland Street, Auckland, New Zealand, have been appointed agents in that colony for Messrs. Ayton & Saunders, of Liverpool, and carry a complete set of samples and a large and comprehensive stock of their general goods.

MESSRS. W. H. WILLCOX & Co., oil-merchants, of Southwark Street, have converted their business into a limited liability company for family reasons, and in order to give their employes an interest in the concern. Besides this no shares will be offered outside. The company retain their warehouses at 34 and 36 Southwark Street, but have opened offices at 23 Southwark Street.

MESSRS. BARCLAY & SONS (LIMITED), 95 Farringdon Street, inform us that they are now distributing “Old Dredge's Annual” for 1898, and that until the supply is exhausted they will be glad to receive orders from chemists for them at 6*d.* per hundred. They print the name and address of chemists who take them on the front cover. Dredge's “Heal-all” is a protected medicine.

PARRISH'S SYRUP TABLOIDS.—Messrs. Burroughs, Wellcome & Co. have introduced sugar-coated tabloids representing 5ss. and 3*j.* of syr. phos. co., or rather the calcium, iron, potassium, and sodium phosphates of these quantities of the syrup. The absence of the free acid is to be regretted. The special advantage of the tabloids is that children who object to the syrup, like the tempting little sweets. The tabloids disintegrate perfectly when suspended in cold water.

COATED PILLS.—Mr. Wand, manufacturing chemist, Leicestershire, has just issued a new price list of his pearl-coated Soluble Pills. It is pocket size, and is price list and formulary in one. When one examines the prices at which well-made pills are now obtainable, it is not surprising that this department of pharmacy is passing out of the retailer's hands. We need not quote examples of Mr. Wand's prices, as he will send a copy of his list to any chemist who asks him, by postcard.

HAZELINE SNOW.—Messrs. Burroughs, Wellcome & Co. have now so far improved this preparation that it contains 50 per cent. of Hazeline. They put it up in collapsible tubes, in which form it keeps perfectly, and never shows the slightest trace of acidity. It is an excellent application for rough skin, and for the toilet generally. For the treatment of hemorrhoids a vulcanite nozzle is supplied which can be screwed upon the tube so that the preparation may be introduced into the rectum. For this latter purpose there are few preparations which give so prompt relief as this remedy.

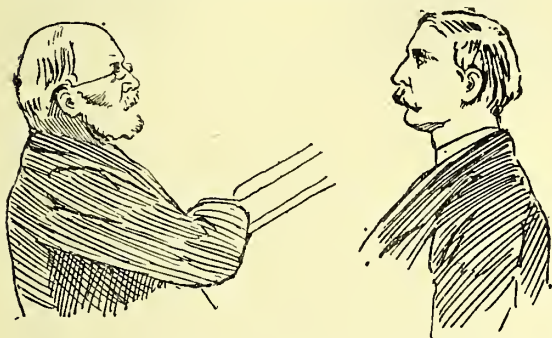
NEW PALATINOIDS.—Messrs. Oppenheimer, Son & Co. (Limited), send us samples of palatinoids, the contents of one representing the solid phosphates of 3*j.* of Parrish's Syrup, and of the other 3*j.* of Easton's Syrup. We have previously noticed a 3ss. Easton's Syrup palatinoid. The makers point out to us that if a child objects to swallow a Parrish's Syrup palatinoid whole, it (the palatinoid) can be pulled open, and the contents mixed with jam—a good idea. There is no free phosphoric acid in either of these preparations, and, as already mentioned, this is an important constituent of the syrups.

IT will be observed from an advertisement in our supplement this week that we have a vacancy on our Editorial staff for a gentleman who has good experience in the retail or wholesale drug trade.

The General Medical Council.

THE UNQUALIFIED ASSISTANT.

THE Council have taken a further step in the direction of stamping out the practice of employing unqualified assistants. The terms of the new resolution which is to take the place of that which has hitherto been periodically published in the medical journals by way of warning to medical practitioners constitute a new departure. Hitherto it has been held that the employment of unqualified assistants was permissible provided they acted under the immediate supervision of their principals; but in future the saving element of personal control is done away with, and the offence is defined as the "allowing such unqualified persons to



THE PRESIDENT (*pro tem.*), THE NEW COUNCILLOR, F.R.S.
SIR WM. TURNER. MR. VICTOR HORSLEY.

attend or treat patients in respect of matters requiring professional discretion or skill," a much more comprehensive clause with a much closer mesh.

An attempt was made to allow medical students to act as unqualified assistants for seven years from the date of registration as students; but as the Council formally disclaim any desire to interfere with "the duly-regulated training of pupils in medical schools, or otherwise, by legally qualified practitioners, and the use of trained pupils in partially treating the sick and injured under the direction, supervision, and responsibility of such practitioners, and the legitimate employment of nurses, midwives, and dispensers," this dangerous suggestion was negatived. Had it been adopted, everyone who had passed any one of the low examinations at present accepted as evidence of proficiency in general education, would have acquired a *prima facie* right to pose as a "pupil assistant" for the space of seven years.

Another foolish suggestion was to create a sort of "close time," during which practitioners actually infringing the resolutions of the Council in this respect would be accorded a delay until 1900 to put their houses in order. As this was withdrawn, it follows that the resolution will take effect forthwith, or at any rate as soon as it has been brought to the notice of the profession in the ordinary way.

PENAL CASES.

The number of cases coming under the penal clauses of the Medical Act has been unusually large this autumn, and is mainly responsible for the length of the present session. They were of the usual kind, with the exception of one case, in which the name was ordered to be erased of a certain practitioner who is at present undergoing a term of imprisonment for indecent assault. He, poor man, did not appear in answer to the summons, because he could not, and if he had it would not materially have modified matters.

The first of the "covering" cases was that of Mr. George Hamilton Wyse, who apparently possesses the gift of ubiquity, for he carried on practice at or about the same consultation-hours at Southport, at Wigan, and at Preston, not omitting a surgery sometime under his name in St. Helens. He had been acute enough to secure as his advocate Mr. Acland, who, as the son of a past President of the Council, may be supposed to be more in touch with professional

susceptibilities than the average barrister. It may be useful to future delinquents to remark that the average barrister is worse than useless in pleading these cases. He invariably insists on the competence and experience of the unqualified assistant who has involved his principal in trouble, instead of boldly stating to the Council that the assistant was far too great a fool for his master ever to have dreamed of leaving him in charge. Another weakness of the genus counsel is to abuse the prosecuting party, overlooking the fact that the "opposite party" represents interests dear to every man on the board. Lastly, he displays a regrettable weakness for quibbling on technical points respecting the law of evidence. The Council knows no such restrictions, and willingly receives any sort of evidence that will throw light on the conduct of the accused. Mr. Acland, apparently, is aware of these details. Mr. Wyse appeared in person to repudiate the charge of covering one Cowan and one Wyse, his son. He was adjudged guilty, but judgment was postponed, so that Mr. Wyse, if he be wise, will take care to be in a position to appear with clean hands before the Council on the next occasion. On that condition alone can he hope to escape erasure.

It may be recollected that last session a venerable gentleman named Hooper, who took his diploma in 1841, was found guilty of "covering," and sentence was postponed. Mr. Hooper decided last week to save the Council further trouble by departing this life, so the "further consideration" of his case is taken out of the hands of the Council.

Mr. Charles Day was brought before the Council because his son, in a weak moment, signed his father's name to a death-certificate, an offence which he has since expiated by a fine of 10/. Mr. Day managed to convince the Council that he was in no wise responsible for his son's misconduct, and the charge was held "not proven," so Mr. Day departed in peace.

The case of Mr. W. R. N. Maloney was much more serious. Mr. Maloney seems to have got mixed up with an unscrupulous medical electrician, of the name of Richards, who tooted him right and left from Melbourne to Mandalay, regardless of the penalties in that case made and provided. A temporary sojourn in Belfast enabled the summons to be served, and in spite of a written appeal *ad misericordiam*, Mr. Maloney was condemned to withdraw from the society of non-advertising practitioners. It is no often that the Council is privileged to wipe out an M.P., but, as a matter of fact, Mr. Maloney has for some years been a member of the Legislative Assembly of Victoria, and it was from the Parliament House at Melbourne that he dated his appeal—the appeal which availed him not.

The next case—that of a Dr. Masson, of Yorkshire—looked unhealthy. The doctor seems to have taken over an unqualified assistant from his predecessors, this assistant being the unqualified son of a race of local doctors. His counsel ingeniously claimed for him considerable experience, alleging that he had attended not fewer than two thousand labours, thus "monstrating conclusively that he was a hardened offender in that particular line. In the act of accusation it was alleged that this assistant had used instruments on a certain woman, and had ruptured the uterus. Although this part of the charge was not substantiated, the fact remains that the woman died. For some inscrutable reason the Council, while finding the defendant guilty of the charge, adjourned sentence, this being equivalent to a verdict of merely "Don't do it again."

Mr. Julius Mostertz, living somewhere in Seven Sisters Road, N., bore outward and visible signs of the article "made in Germany"; but he had possessed himself of the licence of the Apothecaries' Society, and armed therewith he had opened a dispensary in the house of a deceased chemist of the name of Johnson, whose widow carries on the business with the assistance of her brother-in-law, also of the name of Johnson, at 13 Salisbury Road, Hornsey. This Mr. Johnson took charge of the chemist's shop with one hand, and with the other he dispensed the medicines, and *à la rigueur* attended the patients, of Mr. Mostertz—a cumulation of offices which shocked the professional tastes of the neighbouring practitioners. They, in solemn conclave assembled, called on the defendant to justify his conduct, and failing good and sufficient explanation resolved to call him over the coals, especially as he, Mostertz, arrogantly declined to be dictated to. Some piquancy was imported into the case by

the fact that the most important evidence was given by a clerk of the solicitor of the Medical Defence Union, who,



MR. JULIUS MOSTERTZ.



MRS. JOHNSON.

under the guise of a patient, had succeeded in getting a consultation and medicine out of the unqualified assistant in exchange for a few coppers. More piquant still, Mr. Campbell, a neighbouring practitioner, also tried on the same dodge, and testified thereto, thus exposing himself to a



DR. TOMLIN.



THE SOLICITOR'S CLERK.



DR. FOOTT.



DR. CAMPBELL.

(THE NEIGHBOURING PRACTITIONERS AND THE SOLICITOR'S CLERK.)

wicked insinuation at the hands of Mr. Bruce, the direct representative for Scotland, who had the effrontery to ask him whether he had been paid for acting the amateur detective. He replied that his consultation had cost him sixpence, so that he was actually out of pocket over the transaction—the more so as he declared he had not even swallowed the medicine. Mr. Mostertz, *alias* Mosters, did not show up very well in the witness-box, but he managed to propitiate the Council to the extent of getting let off practically with an admonition, though adjudged guilty of the offence.

On Monday the Council had an adjourned appointment with Mr. Alfred Freeman, of Birmingham, in respect of sundry delinquencies alleged against him, so that other matters of considerable importance, including the report of the Pharmacopœia Committee, had to be postponed. The case against him was presented by Dr. Bygott. Mr. Freeman, of Birmingham, proved to be an elderly

gentleman with a large face and a white tie, somewhat of the clergyman or undertaker order. After having filled the post of parish doctor for many years in another large Midland town, he found it necessary, or at any rate desirable (presumably for financial reasons), to transplant his *penates* to another soil. He therefore went to Birmingham two or



MR. FREEMAN, of Birmingham.



DR. BYGOTT.

three years ago, where he purchased a chemist's shop and set up a dispensary. Not satisfied with this achievement, he started another at no great distance, and installed a son in each of them to carry on practice, in—he assured the Council—blissful ignorance of the penalties provided for this particular kind of substitution. Neither he nor his legal adviser was able to put a favourable complexion on the matter, and he was not only adjudged guilty of the offences alleged against him, but, departing from the lenient attitude which had obtained in respect of several of his predecessors in the rostrum, his name was ordered to be erased from the Register.

THE PRELIMINARY EXAMINATION.

Any time the last forty years, whenever the Council has had a little time to spare, the subject of the standard of Preliminary examination has been trotted out. It has been modelled and remodelled, the standard has been put up and then reduced, it has been puttied up and then whittled down until chaos has supervened, and from sheer weariness the subject has been dropped by common consent for a brief space. More recently, however, the steadily increasing number of aspirant doctors, and the gradually growing feeling that the scholastic attainments of the average practitioner were not what they should be, have led to the formation of a healthy public opinion on the subject. One by one the licensing bodies, some voluntarily and others by quasi-compulsion, have relinquished the task of examining would-be students in favour of the Universities and bodies such as the College of Preceptors. Having accomplished this much the Council has felt emboldened to take a step further, and as a result of the discussion on Monday, the Council will, from January, 1899, refuse to recognise as a qualifying examination for medical studentship any certificate of a lower standard than that of the Matriculation, or Entrance, and the Junior Local examinations of the Universities of the United Kingdom. An attempt was made to introduce one modern language, especially French, as a compulsory subject, but it failed in so far that Greek will be accepted as an alternative. The subject of logic—"sixpennyworth of logic," as Dr. MacAlister put it—was struck out of the syllabus, so that each candidate must take either Greek or a modern language. The effect will be that four examinations—through which passed last year a third of the 1,600 successful candidates—are to be disfranchised as being below the minimum standard. These are the Preliminary examination of the Royal Colleges of Physicians and Surgeons in Ireland, the College of Preceptors (second-class certificate of first or second division), the Preliminary examination for medical students (second-class certificate), and the Preliminary Medical examination of the Educational Institute of Scotland.

Acting up to the principle formulated in the past by Mr. Brudenell Carter, a proposal was brought forward to induce the Council to consider the propriety of creating an examination board of its own for the purpose of testing the proficiency

of aspirant students in the subjects of general education. Mr. Carter long since advocated that the profession "ought to keep the keys of its own house," but the proposal has not yet caught the fancy of the Council, and the attempt was frustrated.

REPORT OF THE PHARMACOPOEIA COMMITTEE.

On Tuesday the Committee presented to the members of the Council proof copies of the new Pharmacopoeia as it will appear, subject to the correction of typographical and other errors. The estimated cost of its production is about 6,000*l.*, and if 20,000 copies are printed the cost to the Council will be, roughly, 6*s.* per copy. It is accordingly suggested that the price to the public should be 7*s.* 6*d.*, but they point out that the power of fixing the price belongs to the Commissioners of the Treasury. It is proposed to issue the work early in the new year, after the completion of the necessary formalities.

The proof in question is a portly volume bound in paper. Mr. Brudenell Carter thought 10*s.* would not be an exorbitant price for "the public" to pay for the work, and "the public" apparently comprises everybody except the members of Council, who get it for nothing. Mr. George Brown, on the other hand, thought it ought to be supplied to medical men at a more reasonable figure, and he deprecated in pathetic tones the steady rise in the price of successive Pharmacopœias.

Sir William Turner pointed out that the matter did not rest with the Council but with the Treasury; but Mr. Brown declined to be satisfied with this explanation, adding that the matter of price was one which might with propriety be made the subject of a recommendation by the Council. He would like to see a copy in the hands of every practitioner in England, and there is no doubt that if the possession of the Pharmacopœia would ensure a knowledge, however imperfect, of its contents, the advantage would be worth paying for. It is a lamentable fact that the official compilation is not popular reading, and the few practitioners who develop any curiosity as to its contents usually prefer to glean their information from extra-official sources.

Dr. Glover concurred in the view that the matter of price was one on which the Council might offer an opinion, and urged that this was the proper occasion to do so, but the report was adopted as it stood.

DENTAL EDUCATION AND EXAMINATION.

The Council went into committee to consider the recommendations of the Dental Education and Examination Committee, which was brought up by its chairman, Mr. Bryant.

Some time ago the Committee recommended the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow to join together to form one dental board for Scotland, and they now express their regret that the former body had "resolved that the recommendation of the Dental Committee should neither be accepted nor even entertained." This passage in the report led to a sharp passage at arms between Mr. Bryant on the one hand and Drs. McVail and Heron Watson, the representatives of the two institutions in question, on the other. The fact seems to be that there is no statutory sanction for such a combination, and this is why it has not been attempted. What nettled these gentlemen is that the Dental Committee should, in their opinion, have exceeded its mandate by formulating an expression of regret which Dr. Heron Watson described as "sheer impertinence." Mr. Bryant, however, declined to strike it out of the report.

An interesting discussion took place on the inclusion of materia medica in the dental curriculum. The Committee are of opinion that the knowledge of therapeutics and materia medica which a dental student requires is not very great—in fact, they think he can pick up all he wants in the course of his practical training. It certainly seems curious that a dental student should be required to attend a course of lectures on materia medica, but this requirement is quite on a par with the inclusion in the curriculum of general anatomy and physiology, and one whole year of clinical medicine and surgery. The schedule of materia medica is not, however, very extensive, for no licensing body has ventured to ask more than a knowledge of anæsthetics and narcotics, emetics and purgatives, stimulants and de-

pressants. The Royal College of Surgeons in England, indeed, sets so little store by such knowledge that it has struck out the subject of materia medica altogether, not only for dental, but also for medical, students. Even the examination in medicine Mr. Bryant considered to be "nonsense."

Sir Richard Thorne said he had never come across anything in the proceedings of the Council that had excited so much surprise on his part. The report in question was, he thought, a most extraordinary document. While, on the one hand, the Council devoted much time and labour to repressing the illegitimate practice of medicine, they were at work, on the other, in manufacturing "mongrel doctors." The dental curriculum as it stood was, he urged, a direct encouragement for the dentist to prescribe drugs and treat disease. He would be prepared on a future occasion to move that the Council proceed to consider whether it be not possible and expedient to restrict the education of dental students so as to make it more apt for their particular calling, and less calculated to fit them to practise medicine and surgery. He quoted questions from examination papers set to candidates for the dental licence to show how far afield they went. One of these asked for a description of the foetal circulation in the umbilical cord, and he asked what interest a dental student could possibly have in such a structure as the cord. Nine-tenths of the work imposed on dental students, he said, was not only not adapted to fit them for their profession, but was absolute waste of time. In fact, the whole curriculum was a "gigantic sham." Of course, if such a course could be enforced it would limit the number of dentists, but they had to consider the needs of the public.

Dr. Heron Watson dissented from this view. Personally, he would like all dentists to be compelled to take at least one surgical or medical diploma, for without this extra knowledge how could he be regarded as a safe man. If they wished to make quacks of the dentists they had only to take out all unnecessary subjects—subjects which enabled the dentist to look at things from a broader point of view than through the narrow loopholes of his profession.

The Chairman then put an amendment proposed by Dr. MacAlister, to the effect that the report be referred back to the Committee with instructions to draw up their recommendations in the form of a series of propositions, each dealing with a single subject on which the opinion of the Council could be taken *seriatim*, and this was carried.

DR. RENTOUL *versus* THE COUNCIL.

A comic note was imported into the proceedings by a matter which was brought forward by Sir Dyce Duckworth as treasurer. It seems that Dr. Rentoul applied last session to be paid a supplement of ten guineas, which sum it is customary to allocate to members of Council residing over 200 miles from London. Sir Dyce had refused payment on the ground that the parliamentary fare to Liverpool was 16*s.* 6*d.*, thus establishing the distance to be 198 miles. Dr. Rentoul, however, claimed to reckon the distance from his residence in Liverpool, and reiterated his claim in a letter addressed to the Council. After consuming upwards of a quarter of an hour of time estimated to cost 25*s.* a minute, the Council negatived a proposal by Mr. Brown to pay the sum and have done with it, so Dr. Rentoul will be under the necessity of establishing his claim by legal process. Though one may question the taste of persisting in such a claim it would seem to the outsider that the doctor is in the right, for the legal definition of distance is not based on railway time-tables, and, moreover, it was stated that the A B C gives the distance as 201 miles.

After the transaction of much mysterious business *in camera*, the Council admitted the public to assist at the terminal ceremonies of the session.

HE: "I am really surprised at Dr. White. After being our family doctor for years, and treating me for all sorts of things, and to think of all the money we've paid him, too!" SHE: "What has he done?" HE: "He wouldn't pass me for the life-insurance company!"

FRIEND: And what did the doctor say? Patient's wife: He said he'd have to make a diagnosis. Friend: Don't you have any diagnosis? I knew a man who was taken just the same way, and the doctor made a diagnosis—said he did anyway—and the man died the next morning.

Bankruptcies and Failures.

Re FERGUSSON & FORSTER, 11 & 12 Great Tower Street, City, and 6 & 7 Osborn Street, Whitechapel, Spice Merchants.

THE debtor, John Clark Foster, trading as above, presented his petition at the London Bankruptcy Court on November 26, and upon the application of his solicitors, Messrs. Sole, Turner & Knight, the usual receiving order was made by Mr. Registrar Hope on the same day. The liabilities are roughly estimated at 33,000*l.*, and the assets comprise stock of unestimated value and household furniture to the value of 1,000*l.* at the debtor's residence, Wildcroft, Breckland, near Reigate.

Re CHARLES MONTAGUE, Red Lion Square, Holborn, Patent-medicine Vendor, &c.

At a sitting of the London Bankruptcy Court, held on November 25 before Mr. Registrar Brougham, the public examination of Charles Montague, also known as Napoleon Hirschfeld and as Charles Ashley, was mentioned. The debtor had been in business as a specialist in rheumatic and gout cases at Buxton. He subsequently started business at Red Lion Square as a patent-medicine vendor and specialist in gout and rheumatism. He was eventually made bankrupt, and has been prosecuted for offences under the Debtors Act. Mr. Howell, Assistant-Receiver, now reported that draft accounts had been tendered under the proceedings showing liabilities 1,575*l.* 17*s.* 8*d.*, and assets 1,891*l.* 13*s.* 3*d.*, or sufficient to yield a surplus of 315*l.* after paying all debts. The statement would require considerable amendment, and he asked for the examination to be adjourned. His Honour ordered the hearing to stand over until January 14, 1898.

Re JAMES FURNISS (lately trading as James Furniss and as Reuben Kenning, and now as Edward Rixham), Gildersome Street, Gildersome, late 80 South Street, Park, Sheffield, and Scarccliffe, Derby, late Druggist.

THE accounts herein show that the liabilities amount to 151*l.* 11*s.* 1*d.*, and the assets are estimated to produce 41*l.* 1*s.* 3*d.*. The following are creditors:—

	£	s.	d.
Bentley, Henry, & Co. (Limited), Leeds...	34	12	6
Smith, Jno. (Limited), Leeds ...	10	8	0
Whitaker, Wm., & Co., Bradford...	33	0	0

Re BENJAMIN ROBINSON, Hogsthorpe, Lincolnshire, Drug-dealer, &c.

ACCORDING to the accounts filed in this failure, the liabilities amount to 221*l.* 5*s.* 5*d.* and the assets are expected to realise 114*l.* 10*s.* 9*d.*, from which 11*l.* 10*s.* has to be deducted for preferential claims, leaving 103*l.* 0*s.* 9*d.*, and showing a deficiency of 118*l.* 4*s.* 8*d.*. The following are creditors:—

	£	s.	d.
Alliss, Wm., Alford ...	36	0	0
Kilwood, T., & Son, Boston ...	87	0	0
Lofthouse & Saltner, Hull ...	35	0	0
Wood, J. & C., Boston ...	11	10	0

Re ARTHUR ANGELL, Norham Lodge, Winchester Road, Shirley, Public Analyst.

THE adjourned examination of this debtor took place at Southampton Bankruptcy Court on November 25. Debtor was questioned respecting the transfer of 100*l.* from his No. 2 banking-account to his No. 1 account. He said possibly it was the sum he received from the Corporation under the annexation scheme. Debtor again stated that his failure was caused through his being unexpectedly saddled with costs in connection with the letters patent. The examination was concluded.

Re THOMAS PITTMAN, 2 Colonial Avenue, E.C.

THE first meeting of creditors in this case was held on Wednesday, at the London Bankruptcy Court. The debtor claimed to have discovered a process in connection with the manufacture of paint to enable it to resist damp, and in November, 1896 the Pittman Paint Company (Limited) was

formed to work the process, but the working capital was insufficient, and in August last the company went into voluntary liquidation. To this fact the debtor ascribes his failure. He was to receive 500*l.* in cash and 5,000*l.* in fully-paid shares for his process, and was to be appointed managing director for five years at a salary of 5*l.* weekly. Besides his claim on this company, the debtor has a process for manufacturing an improved elastic transparent varnish or glaze, for which he has already received an offer of 2,000*l.* Negotiations for the sale thereof are now pending. In the absence of any resolution, the estate was left in the hands of the Official Receiver to be wound up in bankruptcy. The public examination of the debtor is fixed for December 17.

Gazette.

PARTNERSHIPS DISSOLVED.

Jones, W. J., and Perkin, R. J., Church Street, Croydon, chemists and druggists.

Lowe, C., and Gill, J., under the style of F. C. Calvert & Co., Manchester, and under the style of Charles Lowe & Co., Reddish, near Stockport, manufacturing chemists.

Skarratt, R., and Bernard, J. de, under the style of de Bernard, Medical and Surgical Home, Bentinck Street Square, W. rrratt & vendish

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Forster, John Clark (trading as Fergusson & Forster), Great Tower Street, E.C., Osborn Street, Whitechapel, E., and Backland, near Reigate, wholesale spice-merchant and liquorice-importer.

Marriages.

JONES — CHARRINGTON; CHARRINGTON — HEATH.—On November 22, at Lichfield, Mr. William Jones, of Hanley, to Miss Charrington, daughter of the late Mr. Wm. Charrington, chemist and druggist, Lichfield; and Mr. Thomas Dixon Charrington, third son of the late Mr. Wm. Charrington, to Miss A. Heath, youngest daughter of Mr. J. Heath, of Leomansley.

NEWBERY—ARNOLD.—On November 24, at the Old Church Calcutta, by the Rev. Herbert Gouldsmith, M.A., vicar, assisted by the Rev. C. L. Olsen, B.A., the Rev. L. Archibald McC. Newbery, eldest son of Lionel Newbery (of F. Newbery & Sons, London), to Clara, daughter of Alfred R. Arnold, of Heath Court, Bournemouth West. (By cable.)

RAITT—GRIFFITH.—On November 23, at Kiltteerock Parish Church, by the Rev. Arthur McQuade, B.A., Mr. John Raitt, druggist, Stranorlar, co. Donegal, to Maggie, second daughter of Mr. Elias Griffith, Donegal.

Deaths.

BRAIN.—On November 23, very suddenly, Mr. F. S. Brain, chemist, of Abbeygate Street, Bury St. Edmund's. Mr. Brain had been out during the morning, when he appeared in his usual health. Whilst in the shop later in the day he was seized with a fit, which terminated fatally about an hour after the attack.

HAMILTON.—On November 30, at 15 Royal Terrace, West Kingstown, J. Francis Hamilton, Esq., M.D., at an advanced age. Dr. Hamilton was formerly proprietor, and of late years managing director, of the firm of Hamilton, Long & Co. (Limited), State apothecaries and pharmacists, Dublin and Kingstown.

HIRST.—On November 20, Theresa Blanche, wife of Mr. Edward Hirst, chemist and druggist, 114 Jubilee Terrace Colne. Aged 35.

LEATHER.—Recently, at Greenhill Hall, Bingley, Mr. G. H. Leather, manufacturing chemist, Northbrook Works. Aged 82 years.

MELHUISE.—On November 10, Mr. John Melhuish, chemist and druggist, late of Dartmouth Park Hill, London, N. Aged 77.

New Companies and Company News.

JOHN FOX (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a mineral-water manufacturer and cab-proprietor carried on by John Fox, at Hanley, Staffs.

UNIQUE SOAP AND CHEMICAL COMPANY (LIMITED).—Capital 40,000*l.*, in 10*l.* shares. Objects: To manufacture, sell, and deal in soap, chemicals, and bleaching, dyeing, printing and fulling materials. Registered office, Hampson Mills, Bury.

CASTLE BRAND COMPANY (LIMITED).—Capital 100*l.*, in 10*l.* shares. Objects: To carry on the business of manufacturers of colours, paints, varnishes, stains, dyes and polishes. The first directors are:—A. Holmes, J. H. Holmes, L. W. Holmes and E. Holmes.

HOLLOWAY'S WINE COMPANY (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To carry on the business of wine and spirit merchants, distillers, brewers, aerated and mineral water manufacturers, and makers of and dealers in tonics and medicinal preparations.

MAXIM CARBIDE PROCESS AND ACETYLENE GAS SYN-DICATE (LIMITED).—Capital 2,500*l.*, in 1*l.* shares. Objects: To acquire, work, and turn to account certain patented inventions relating to the manufacture of calcium carbide or acetylene gas, belonging to Hudson Maxim.

FROMM'S EXTRACT COMPANY (LIMITED).—Capital 35,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with the Red Cross Germicide Company (Limited), and to manufacture, sell and deal in vegetable or meat extracts, foods and products, and any form of nutritive, stimulant or medicinal food.

GEORGE WHYBROW (LIMITED).—Capital 60,000*l.*, in 5*l.* shares. Objects: To adopt an agreement with Richard Reynolds, and to manufacture, sell and deal in drysalteries, pickles, sauces, chutney, preserved provisions, dry soap, black lead, blue, castor oil, salad oil, vinegar, &c. Registered office, 290 Cable Street, Shadwell, London, E.

BRITANNIA SOAP COMPANY (LIMITED).—Capital 25,000*l.*, in 1*l.* shares (7,500 5*l.* per cent. cumulative preference). Objects: To acquire the businesses carried on by the Britannia Soap Company, and by the Westfield Soap Company (Limited), and to manufacture and deal in soap, candles, colours, paints, dyes, chemicals, explosives, drysalteries, &c.

ORIENTAL SALT COMPANY (LIMITED).—Capital 50,000*l.*, in 10*l.* shares (4,500 preference and 500 deferred). Objects: To acquire the businesses of salt-manufacturers carried on at Karassa and Jagganaiapur, British India, by Stuart, Hall & Co., and Hall, Wilson & Co., to acquire certain inventions relative to the manufacture of salt, and to manufacture, sell, and deal in salt, compounds of soda, and alkalis, and other chemicals and chemical products. Registered office, 9 Throgmorton Avenue, E.C.

MATTHEWS' LANCASHIRE, CHESHIRE AND NORTH WALES DISTRICT WHITE LEAD COMPANY (LIMITED).—Capital 45,000*l.*, in 1*l.* shares. Objects: To acquire a licence to use certain inventions relating to the manufacture of white lead, to adopt agreements with Matthews' White Lead (Limited), the Hull and Liverpool Red Oxide Company (Limited), and Vincent J. Barton, and to carry on the business of white-lead manufacturers, importers and dealers, smelters, desilverisers, chemists, druggists, drysalteries, &c. The first directors are:—Henry Fludyer, Louis E. Ames and Lee Bake. Registered office, Old Quay, Runcorn, Cheshire.

GERMAN CHEMICAL-DIVIDENDS.—The annual report and balance sheet of the chemical-works formerly Heinrich Byk in Berlin for the year ending June 30 states that the course of business has been fairly satisfactory, and that the demand for the products of the factory has increased. The works have been enlarged, and a considerable proportion of orders have already been booked for the next business year. The expenses, including an amount written off for depreciation,

amount to 127,804*m.*, leaving a net profit of 158,879*m.* It is proposed out of this amount to carry 5 per cent. to the reserve fund, to pay 8½ per cent. dividend on the ordinary share capital of 1,500,000*m.*, to pay 20,000*m.* as bonus to the directors and staff, and to carry forward to account 3,816*m.*

VEJOS (LIMITED).—An interim injunction was granted on Wednesday against Vejos (Limited), on the application of the *Times*. Vejos is a new food-preparation, which was lately advertised in the *Times*. A day or two after an advertisement appeared in the *Financial Times*, and it is alleged by the *Times* that in the later advertisement quotations from the earlier one were given as if they were expressions of the opinion of the *Times*.

THE GUTTAPERCHA CORPORATION (LIMITED).—The prospectus of this company appears among our advertisements. The company proposes to work the invention of Professor Gerullas, by which guttapercha can be obtained from the leaves and twigs of guttapercha trees. The testimony of such authorities as Lord Kelvin, Professor Ramsay, and Dr. John Hopkinson seems to place the efficiency of the process beyond doubt, and the directors are men of high standing. The capital is 200,000*l.*, and 80,000 7-per-cent. preference shares and 80,000 ordinary shares are now offered to the public. Applications for shares must be received on or before Saturday, December 4.

THE CHEMISTS' AERATED AND MINERAL WATERS ASSOCIATION, LIMITED (Camwal).—The directors' report for the year ending September 30 last announces a dividend and bonus amounting to 12½ per cent., notwithstanding that a large portion of the capital was expended on new factories at Manchester and Birmingham, which, unfortunately, were not completed in time for the past season's trade. The Manchester factory is now turning out waters acknowledged by the medical profession and chemists in the district to be of exceptional quality. The Birmingham factory is finished and fitted. During the past year there has been an increase of 327 new shareholders (after deducting those who have sold their shares), making the total number of members 4,268. The net profit on the year's business was 5,923*l.* 2*s.* 2*d.* The dividend and bonus absorb 5,016*l.* 2*s.* 6*d.*, and the sum of 906*l.* 19*s.* 8*d.* is carried forward.

A. & R. THWAITES & Co. (LIMITED).—The annual report of the directors of Messrs. A. & R. Thwaites & Co. (Limited), chemists and mineral-water manufacturers, Dublin, states that the net profit for the year amounts to 5,697*l.* 17*s.*, which, with the balance of 1,051*l.* 1*s.* carried forward from last account, makes 6,720*l.* 18*s.* Deducting from this 102*l.* 14*s.* income-tax and 1,850*l.* paid as interim dividend for the half-year ended March 31, 1897, there remains a sum of 4,768*l.* 4*s.* available for distribution. The directors propose to pay a dividend at the rate of 5 per cent. on the preference shares, and at the rate of 7 per cent. free of income-tax, together with a bonus of one shilling per share, on the ordinary shares for the final six months; to place 1,500*l.* to the reserve fund; and to carry forward the balance of 1,068*l.* 4*s.* to next account. Messrs. John Chambre and Edward Dillon retire from the board by rotation, and, being eligible, offer themselves for re-election. The auditors, Messrs. Stokes and Pim, also retire, but offer themselves for re-election.

BOOT'S (LIMITED).—The fifth annual meeting of this company was held at Nottingham on Tuesday. Mr. Jesse Boot, managing director, presided. We gave the principal details of the report last week. The balance-sheet showed an increase of 2,900*l.* over last year in net profits, and the directors recommended a bonus of 2½ per cent., in addition to the usual 10 per cent. The Chairman, in moving the adoption of the report, referred with much regret to the retirement from the Board of Directors of Mr. Alderman Duckworth, now M.P. He said he had enjoyed Alderman Duckworth's friendship for nearly twenty years, and was not without hope that after a little experience of parliamentary life he might be disposed to resume his position on the Board. Mr. Boot said that, although this was only the fifth annual meeting of the company, the business was started twenty-four years ago. He felt at that time there was great force in the expression of John Stuart Mill, to the effect that competition as then carried on did not benefit the public, but simply divided the business into small proprietors, each making a huge profit compared with their small turnover. He claimed that

breaking through the traditions of trade as regards profits they had not only served the public, but had made a splendid business for themselves. In further course of his speech, Mr. Boot referred to the P.A.T.A. as follows:—"Possibly you may be aware that an association has lately been started to force retailers to go back to the old system of retail trading, to put cash-customers and credit-customers on one level of price in purchasing, and that chemists who order five or five hundred pounds' worth from wholesale houses to retail must sell at the same price to their customers, whether they pay at once for the goods, or whether they pay in 12 months, or whether they never pay at all. Our policy is to go direct to manufacturers to buy what we want, and sell it for what we like. This new forcing scheme, which is called the Proprietary Articles Trade Association, we consider antagonistic to true trade principles, to our customers, and to the interests of the public. The promoters wish to fix the prices at which we should sell goods to our customers, and, to show its tyrannical character, I may say that while we lately agreed with some well-known proprietors to sell at the price they wished, which was higher than the price we wished, this precious association wanted them to stop our supplies because we declined to sign an agreement parting with our liberty of action as regards the prices of a number of insignificant proprietary articles, many of which have only a temporary vogue, and which we do not stock, but are occasionally asked to procure to order. I have here an auditors' certificate to the effect that having fully examined our books they find that the differences between the prices at which we sell proprietary articles and the prices printed on the articles, to which this association aims at raising them, made a difference to our customers in the three towns of Sheffield, Lincoln, and Nottingham, on 3 per cent. only of the number of such articles which we deal in, of 4,773% during the year ending September 30, 1895, and 5,163% during the year ending September 30, 1896. From this it may be imagined what the savings must be on the other 97 per cent. of these goods in all the towns we occupy." Mr. Boot then discussed the accounts at some length, and referred especially to the Branch-manager's Fund, which, with another 500% from the company, and 250% from himself, would be raised to 1,500%. He hoped by means of that fund to create an *esprit de corps* among the managers, and to increase their zeal for the prosperity of the company. Alderman Sands seconded the motion, and the report was adopted unanimously. Mr. John Gibbs was re-elected a director, and Messrs. Sharp, Parsons & Co., Birmingham, were re-appointed auditors of the company at a fee of one hundred guineas and out-of-pocket expenses. A cordial vote of thanks to Mr. Boot and to the staff was passed unanimously.

Personalities.

MR. J. B. BENNETT, who for the past seventeen years has travelled for Messrs. Thomas Hodgkinson, Prestons & King, has been compelled to retire, on account of his health.

DR. FRANK CLOWES, chemist to the London County Council, has been appointed district agricultural analyst for the county of London. This appointment was held by the late chemist, Mr. W. J. Dibdin, who resigned it with the post of chemist to the Council.

MR. H. J. MACMILLAN, the popular senior assistant of the British Pharmacy at Buenos Ayres, has resigned his position and returned to England to recruit his health. Mr. Macmillan passed the Argentine Pharmaceutical examination after a residence of barely twelve months in the Republic. He may return to Argentina shortly and open a high-class British pharmacy there.

DR. F. S. KIPPING, F.R.S., at present lecturer in chemistry at the Central Technical College, London, has been appointed professor of chemistry at University College, Nottingham, in succession to Dr. Clowes, who has been appointed chemist to the London County Council. Dr. Kipping is a D.Sc. of London University and a Ph.D. of Munich. He has done much brilliant research-work, and has been a most successful teacher. He is aged 34. It is a very rare thing for so young a man to attain to the dignity of a F.R.S. Dr. Kipping will begin his work as professor in January next.

MR. FREDERICK BIRD, chemist, has been re-elected a member of the Coventry School Board. He was second on the poll, and will probably be re-elected chairman. He enlisted in his service on the day of the polling the motor-car which was his principal vehicle at the municipal election.

PROFESSOR JOHN URI LLOYD, of Cincinnati, has written another novel, "The Right Side of the Car," which is "a vivid story of Northern Pacific travel." The proceeds of the book will be devoted to the creation of a fund for the erection of a monument to the memory of Dr. John King, the discoverer of podophyllin.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section free of charge, if properly authenticated.

MR. C. H. OSMOND has purchased the business of Messrs. Rait & McNicol, 362 Hamilton Place, Partick, Glasgow.

MR. A. CRUICKSHANK, Ashley Terrace, Edinburgh, is about to open a new pharmacy in Fisher Row, Musselburgh.

MR. JAMES SYMON, late with Lewis & Burrows, is opening up at 49 Great James Street, Lisson Grove, N.W.

THE Pacific Borax and Redwood's Chemical-works notify that their registered office has been moved from Dock House to 14 Billiter Street.

MR. LYONS, of Upper Street, N., has purchased (through the agency of Messrs. Berdoo & Co.) the business of Mr. Hughes, at 372 Harrow Road, W.

THE business of Mr. Priest, 22 Parliament Street, S.W., has been closed, and the prescription-books have been transferred to Messrs. Hooper & Co., Pall Mall.

MESSRS. CARÉNOU & TUR, of Moussac, France, have appointed Messrs. Jeancard, Gazan & Doumin, 13 St. Mary Axe, London, E.C., agents for their Spanish juice (block and sticks), Zaragozana brand.

MR. A. G. GREEN, chemist, Rhosymedre, Ruabon, has disposed of his business to Messrs. L. Rowland & Co., of Wrexham, who will carry it on as a branch. Mr. David Jones, late of Carnarvon, will be the manager.

MESSRS. R. W. GREEFF & Co., chemical-agents, on December 2 removed their offices from 3 Eastcheap to the building of Messrs. Peek, Winch & Co. (Limited), No. 20 Eastcheap (first floor).

MR. MACROSSEN, of Forfar, has disposed of his business at 36A West Port, Dundee, to Mr. M. Thomson, who has resold the business to Mr. Midder, of Peterhead. Both transactions were conducted by Messrs. Berdoo & Co.

MESSRS. ARTHUR H. COX & Co., of Brighton, the well-known "tasteless-pill manufacturers," have taken the premises adjoining their factory in St. Martin's Place, and these are now being fitted up as an addition to their laboratory. Extra machinery has also been added to their plant.

THE business of Messrs. Napoleon Price & Co. (Limited), sole successors to Price & Gosnell, and proprietors of the Royal Perfumery Company, has been taken over by Messrs. Roger le Beau et Cie. (Limited), and Mr. Paul Villain (of Paris), lately manager and perfumer to Messrs. Crosfield & Sons, of Warrington, has been appointed managing director.

MESSRS. ALFRED HENRY EVANS, John Frank Gray, and Wm. Hood have commenced business at 9 Sheppy Yard, Minorities, E., as spice, seed, liquorice, drysaltery, general produce merchants and importers, under the style of "Evans, Gray & Hood." The members of the firm have all been associated with the house of Fergusson & Forster, and they state, in their circular, that they are in a position to offer Solazzi and Grasso liquorice-juice upon the usual terms.

NEW REMEDIES.—How little claim some of these products of the "actien gesellschaft" class of factories really have to recognition is fully realised only when one meets in the pages of the pharmaceutical press of Germany the scientific presentation of the therapeutics of some speciality of American origin, whose shady reputation happens to be but too well known to us.—*American Druggist.*

The Early-closing Movement.

THE HOME SECRETARY'S OPINION.

A SOMEWHAT numerous and very representative deputation in support of Sir John Lubbock's Bill was received on Wednesday at the Home Office by the Home Secretary.

Sir John Lubbock, Bart., M.P., was accompanied and supported by W. R. Bousfield, Esq., Q.C., M.P., Mr. Councillor Kellit, J.P. (President of the Federation of Associations of the United Kingdom for the Grocery, Provision, Oil, and Italian Warehouse Trades), Mr. John Williams (President of the Manchester and District Grocers' Association and of the Northern Council of Grocers' Associations), Mr. L. S. Richards (President Birmingham Drapers' and Hosiery Association), Mr. Thomas W. W. Flint (Glasgow grocers), Mr. Howieson (Chairman of Scottish Shopkeepers' and Assistants' Association), Mr. G. W. Sutherland (North-Western Grocers' Association), Mr. W. H. Templeman (Hull grocers). There were also in attendance, and prepared to speak, Councillor and ex-Mayor G. E. Couzens (Portsmouth), Councillor Swinton, J.P. (Crewe), Mr. Thomas Lloyd (High Constable of Aberdare), Alderman Roberts, J.P. (Exeter), Mr. Lewis Moir (Ipswich), Mr. E. Langston (Reading), Mr. M. Gravett (Wolverhampton), Mr. A. C. Wootton (chemists and druggists), &c., but, as the Home Secretary intimated that personally he was satisfied with the arguments stated by previous speakers, these latter gentlemen did not address the Minister.

Sir John Lubbock recounted the history of the movement in many of its aspects, dealing very largely with its Parliamentary vicissitudes. He next dealt with the question of health, passing on later to show the adhesion of the Trades Council, and also making a strong feature of the fact that a large and influential body of London medical men, including the President of the College of Surgeons, had supported a memorial which was issued to all London medical men in favour of this Bill. Sir John Lubbock urged on the Home Secretary that he was asking the Government to take up or support a measure more or less similar to his Bill, not in order to save himself trouble, but because the forms of the House of Commons permitted a mere handful of opponents to defeat any private Member's Bill.

Mr. Bousfield, Q.C., M.P., said the base question was really this: Shall the small minority by standing out compel the huge majority to keep open, or shall the huge majority be enabled to compel the small minority to close?

The other speakers mentioned above used similar arguments, each adding special features of their own districts.

THE HOME SECRETARY'S REPLY.

Sir Matthew White Ridley said he was conscious that there were not only the Association represented so illustriously by Sir John Lubbock, but also a very large number of Associations in the Kingdom in favour of achieving by legislation that which they had tried to achieve by voluntary effort, and which they said had hitherto failed. He did not wish to minimise the strength of feeling animating this desire, for there could hardly be a difference of opinion that if the shop hours now prevalent in many places could be curtailed it would be no injury to the public, but the contrary, and it would be an inestimable boon to shop assistants and their employers. But, at the same time, he felt himself in a difficult position, for while he was aware that Parliament had passed an abstract resolution supporting the principle of Sir John Lubbock's Bill, it could not be denied that this Bill was the thin end of the wedge for regulating the hours of adult labour. And there was no instance of adult labour being regulated in this country except on grounds of health or of danger to life (women and young persons being left out of the question). In 1892 a Shop Hours Bill was passed which originally included women, but in its passage through Parliament the reference to "women" was dropped out and "young persons" only dealt with. But this present Bill asked that adult men of any age who were shopkeepers, or employed by shopkeepers, should be brought under the law. The right hon. gentleman would not cite that as an argument for no legislation, but he did consider it a ground for proceeding with excessive caution.

If the Legislature began regulating adult labour as proposed in this Bill it was not at all easy to foresee where it could stop. But at present, he repeated, beyond the admitted advantage of shortening hours of adult labour from the points of view of health or of danger to life there was no precedent for legally interfering in the matter at all. It would be altogether a new departure to grant legal powers to compel persons to close their shops when they did not sympathise with that view; it was a step which could only be justified on strong grounds of health or public utility, and he frankly admitted that he wanted more convincing before he could feel satisfied that Parliament would in the long run be justified in taking that new departure. For he would point out that it was not proposed to deal especially with women; if he understood the views of this deputation, they advocated that all those engaged in shops should be dealt with alike. (Applause.) And, moreover, this was not only a question of assistants, but also of those who employed them. Therefore they had to face a much larger question than that which, as Sir John Lubbock had said, was advocated by medical men. Parliament ought to be very cautious how it proceeded in this matter; he did not say Parliament ought not to deal with it, for already the voice of Parliament had shown they were disposed that something should be done. But he, personally, was obliged to look at it from a practical point of view, and the carrying out of any such legislation as that now proposed would be attended by very considerable difficulties. Taking London as an example, where the County Council had loyally endeavoured to carry out the Shop Hours Act, it seemed to him this would be a very difficult measure for them to enforce. If the deputation would read the L.C.C. Report they would see the difficulty there had been in carrying out the Shop Hours Act, and these difficulties would be increased under the proposed Bill. There was the difficulty, too, as had been pointed out by some of the speakers, of defining trades. Therefore he did not feel he was prepared to advise his colleagues to take up this question next Session. At present he was only speaking of his own view; he attached more value to voluntary efforts, and was disinclined to take up the cause advocated to-day; but still he confessed to being strongly impressed by the unanimous desire that had been brought before him. He was willing to be convinced, and was anxious to study the matter in all its bearings, but he was not a believer in legislation at this moment. He could not bring himself to believe that 95 per cent. of Englishmen would allow themselves to be coerced by a trifling minority. Nevertheless, he considered what Parliament had done in the past indicated a desire to do more in the future, though his own view was that early closing was improving. (No, no.) In conclusion he promised to fully and accurately represent to his colleagues the views of the deputation.

Sir John Lubbock, in thanking the hon. gentleman, expressed the hope that at some future time he might feel more disposed towards the principle of his Bill, and mentioned incidentally that a precedent for interfering with the hours of labour and of closing shops was found in regard to public-houses.

No reply was given to this point, and the deputation then withdrew.

Mr. John Barker, of Kensington, afterwards entertained the deputation at a dinner at the Hotel Cecil.

Our Town Traveller.

"CITY" SOAPS.

I TAKE it I may apply that as a general title to all the productions of Messrs. D. & W. Gibbs (Limited), of the City Soap-works, whose office in Finsbury Circus, E.C., I dropped into one day this week. One can see a good many styles in soaps there, as the firm have been making soaps for more than a century now, and it is wonderful how many old favourites are still favourites spite of all the new soaps which have come into the market during recent years. In one modern direction the firm have obtained a high reputation—i.e., in the manufacture of milled soaps, and as they start with a basis made by themselves they know that everything is right from the beginning. For Christmas trade I hear that the Koh-i-Noor tablets which were brought out at the Jubilee time are going well. The

box they are put up in is pretty to look at, and the soap is exquisite in appearance, detergent power and perfume. The scarlet medallion of the queen in the centre of the cake is a clever notion. Another good line for small Christmas presents is a half-dozen box of visitor's tablets; the box is an ornamental one, the tablets good, and the price right—1s. I noticed a new "Butter-milk" tablet which the firm have recently brought out; this appears to be a pure white curd-soap, nicely perfumed, and finished, both in cake and wrapping, better than butter-milk soaps generally are. Another good soap for sale at any time is the "Diamond" tablet, an oval in all the popular brands, "honey," "glycerine," &c.

ST. PAUL'S PERFUMERY-SPECIALITIES.

Messrs. Francis Newbery & Sons have been working the perfumery-trade for a number of years, and their provision of articles suitable for a chemist's business is both extensive and attractive. One very handsome package particularly suitable for a Christmas present, is a leatherette-case, containing a large bottle of perfume and a very good, and good-looking spray-producer. The retail-price for the whole arrangement is 7s. 6d., which, having regard to the quality, is extremely cheap. Messrs. Newbery & Sons' cheaper lots include a card-case, containing three mitre-stoppered perfumes, to retail at 4s.; a pretty blue-and-gold case, with a Christmas-card let into the cover, as a shilling article; and a really notably cheap sixpenny perfume, packed in a leatherette-case, bearing only the word "Souvenir" in gold letters. These are only random specimens of their stock, which is very various and comprehensive. I should presume that their styles in silk-lined fancy-cases of perfumery number well over a hundred. These vary in retail-price from 2s. 6d. to 12s. 6d. each, and I may remark that for a chemist to cultivate a really good Christmas present trade it is essential that his stock should include a fair assortment of the more expensive goods.

AT "BARCLAY'S."

It would be impossible to write about everything I saw at Messrs. Barclay & Sons' showrooms (writes our Town Traveller), and the difficulty still remains of selecting from among so many, the most suitable novelties more or less connected with the "peace and goodwill" season. The genial Mr. Gray, who was in charge, had just finished booking a customer's orders when I entered, and under his guidance we set to work. In leatherette perfume-cases of assorted colours and sizes there was a good selection at 10s. 6d. and 15s. doz. They are silk-lined, and handsomely decorated with gold borders. Another series of perfumes is put up in elaborately cut Bohemian toilet-bottles, in sizes of 1 to 5 oz. I also noticed a popular shilling line in souvenir boxes of assorted tints, containing 1 oz. bottles with gold-blocked labels; and a sixpenny one in globe, flask, and round bottles. A sign of the times are tooth-brushes of Japanese manufacture, and from all appearances they are likely to take. The handles of the brushes are carved and coloured in imitation of bamboo. They are cheaper than if they had been made in Germany, and are a century in advance of the brush which the Japs use themselves, which is a cane stick frayed at one end.

Messrs. Barclay have a new American sachet, oblong in shape, in three odours, called Garland of heliotropes, roses, and violets. The cover of the envelope is appropriately decorated with a garland of flowers and gilt border; altogether, they make a neat and saleable 6d. article. Sachet-bags can also be obtained in party or racing colours, put up in circular glass-covered boxes at 4s. per dozen. Messrs. Barclay have also taken up the agency for an American breath perfume called "Sweet Scent," in the form of a tiny aromatic cachou. A pocket purse-puff of French make, with leather strap on back, suitable for ladies' use at dances, &c., is a cheap line in two sizes, 6d. and 1s. Puffs are also made in the military hair-brush shape, with stained-wood backs. The bristles of the brush or puff are made of fine goats-hair, and take up the powder readily. Of porcelain shaving-mugs and bowls boxed with brushes Messrs. Barclay have a large assortment, including the Nautilus, Swan, and Dolphin patterns. I have a lot in my note-book about their winter specialities, but space is valuable this week, I am told (it always is when I go on the rampage), and I must leave these for the trade to look after.

London Drug Statistics.

THE following statistics relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses in the course of the eleven months from January 1 to November 30, 1897 and 1896, and to the stocks on November 30 of these two years. Their accuracy cannot be guaranteed.

Article	Stocks		Imported		Delivered	
	1897	1896	1897	1896	1897	1896
Aloes.....cs, &c.	2,687	4,199	1,631	2,804	2,985	3,596
".....gourds	1,839	2,067	2,352	—	2,469	632
Anise, Star.....cs	64	130	100	3	160	144
Arrowroot....brls	9,253	12,544	11,963	15,656	14,455	16,761
".....bxs & tns	1,857	2,212	753	1,402	1,419	1,249
Balsams (all medicinal).....cks, &c.	424	616	442	596	824	1,343
Cinchona-bark:—						
S. American.....cs	54	56	—	—	2	2
".....bls, &c.	12,576	14,588	3,077	2,651	4,327	5,312
E. I., Ceylon, fcs	395	299	197	283	110	254
and Java (bls)	4,492	8,513	9,238	16,185	12,748	16,843
Borax.....pkgs	15	113	633	36	629	1,145
Calumba.....bgs	11,363	12,405	7,318	6,373	7,882	10,241
Campbor.....pkgs	462	276	3,217	1,823	3,199	2,523
Cardamoms....cs, &c.	2,162	2,345	1,553	2,781	2,093	2,175
Cochineal.....bgs	35	72	—	147	37	166
Occlusus Ind.....	5	5	2	—	—	9
Cream of tartar cks	467	480	321	296	325	212
Cubcbs.....bgs	67	72	173	140	165	247
Dragons' blood...cs						
Galls—						
China and Jap. cs	560	1,133	769	1,981	1,188	1,355
Trkey. & Persn. bgs	3,390	6,787	6,142	7,409	8,381	5,579
Gums—						
Acacia.....pkgs	12,551	12,235	23,564	22,281	23,973	21,009
Ammoniacum ..	32	43	16	19	13	59
Animi & copal ..	18,049	14,612	35,655	29,878	32,595	23,966
Asafetida ..	528	317	1,037	736	770	1,182
Benzoin ..	2,596	3,165	3,307	4,946	4,114	3,289
Damar ..	2,927	3,957	4,424	8,100	5,196	6,195
Galbanum ..	—	1	—	—	1	1
Gamboge ..	302	207	329	408	218	350
Guaiacum ..	126	44	167	87	91	100
Kino ..	19	25	21	25	29	14
Kowrie ..	788	952	3,006	2,653	3,265	3,138
Mastic ..	—	8	9	23	21	35
Myrrh ..	583	606	352	493	351	423
Olibanum ..	1,048	2,861	2,716	5,924	4,316	5,120
Sandarach ..	89	40	1,222	825	1,230	1,048
Tragacanth ..	2,880	3,921	5,888	7,684	7,064	5,742
Gutta-percha ..	1,526	1,710	1,296	1,216	1,422	1,589
India-rubber—						
African, &c. tons	5	1	23	4	24	1
Assam, &c. ..	104	66	877	626	868	751
Madagascar ..	32	74	173	189	217	163
Mozambique ..	68	52	344	298	334	372
South American ..	103	130	476	354	496	298
Indigo, E.I., ..chts.	16,416	12,109	18,637	19,972	13,694	16,124
" Spanish srns	1,019	1,061	2,100	2,769	2,360	2,442
Ipecacuanha, Brazil bls	219	457	576	538	804	665
" Other kinds pkgs	19	31	194	145	196	152
Jalap ..	347	329	297	381	254	304
Nux vomica .. pkgs	143	718	922	634	944	1,009
Oils—						
Anise.....cs	147	49	235	83	133	164
Cassia ..	116	20	231	53	135	64
Castor.....cks	52	130	802	1,161	961	1,112
".....cs	310	611	1,007	1,267	1,062	1,722
Cocoa-nut .. tons	106	393	1,259	1,819	1,496	2,170
Olive .. cks &c.	779	957	1,870	2,558	2,250	2,044
Palm.....tons	22	5	55	122	47	124
Quinine sulphate lbs	92,372	89,465	35,530	14,378	31,112	48,189
Rhubarb .. chta	941	522	1,447	736	967	1,137
Safflower .. bls, &c.	220	170	184	214	112	107
Sarsaparilla .. bls	254	302	949	946	558	910
Senna .. bls &c.	1,216	2,828	3,359	5,953	4,949	5,722
Shellac—						
Button ..cs	7,072	5,839	11,008	8,807	9,857	9,096
Garnet ..	5,326	4,601	7,129	6,392	6,050	7,674
Orange ..	37,137	23,098	49,122	46,104	37,498	36,594
Total....	49,533	33,538	67,259	61,203	53,405	53,264
Turneric—						
Bengal .. tons	244	538	34	93	319	314
Other kinds ..	156	413	82	129	300	352
Total....	400	951	116	222	619	666
Vermilion chta, &c.	—	7	—	17	7	26
Wax—						
(Bees') bls & srns	1,343	470	3,206	1,829	2,273	2,482
" cks & cs	1,619	1,142	3,753	2,826	3,089	2,681
(Japan) .. cs, &c.	148	226	382	282	421	527

Trade Reports.

42 CANNON STREET, E.C., December 2.

THE week under review has been a rather quiet one in the drug and chemical markets, although a fairly steady trade continues to be done. In fine chemicals the principal alterations we have to report are a further advance in cinchonidine, and a quiet market for quinine. Opium salts are very firm, but for the present unchanged. Camphor quite steady. Saccharin is offering in Germany at lower rates, but this article must, of course, not be exported to the United Kingdom. English manufacturers have raised their prices for ether from grain spirit. Methylated ether remains unchanged. One of the cocaine makers has raised his price for hydrochlorate another 3*d.* Citric and tartaric acids are quiet, but cream of tartar is rather firmer. Glycerin shows no alteration. In heavy chemicals we have to report a steady market for wood-naphtha. Sulphate of alumina is dearer. Soda ash and crystals, as well as caustic soda and recovered sulphur are extremely firm, while chlorate of potash is weak; otherwise there are few alterations to call for remark. Quicksilver has undergone no change. Cyanide of potash is very firm. In drugs there is a good demand for coca leaves. Opium firm and tending higher. The prices of ipecacuanha have been raised by holders. Quillaia offers cheaper for delivery. Pistachio nuts have somewhat advanced. Menthol steady. Insect-flowers easier. In essential oils there has been a further strong advance in oil of lemon, and cajuput oil is also dearer, while English-drawn oils of buchu, dill, and pimento have been raised in price. Peppermint oil steady. Star-anise oil tending somewhat lower. Lemon and bergamot quiet, and with perhaps a slightly easier tendency. Balsam tolu is tending downwards. Guinea grains are extremely firm and scarce. Damiana leaves, aconite root and taraxacum very firm and tending higher. Mastich steady. Cascara sagrada fairly steady. Cod liver oil is in somewhat better demand. Saffron still tending downwards. Cumin seed is firm, fennel seed dearer, linseed firm, and coriander seed has advanced in price. In spices, we have to note that fine cinnamon is dearer, while ordinary qualities are slightly easier.

The failure of the consignees of Solazzi-juice, which we announce in our legal columns has, naturally caused a good deal of speculation concerning the future commercial course of that popular brand of liquorice. It is generally known that Solazzi-juice, on account of its long-established reputation, commands a much higher price than any other brand of liquorice, no matter how good. Within the past few seasons the price of Solazzi-juice has fallen some 20 per cent., and lately 5-case lots have offered at 135*s.*, smaller wholesale quantities at 137*s.* 6*d.*, per cwt. It is generally thought that the stock of liquorice held by the consignees at the time of their failure was exceptionally large, and in addition to that supply a new crop is now being shipped. But we hear that the whole of this juice has been brought under the control of a well-known London-German firm of export-druggists, who are by no means likely to reduce the quotations unduly. One or two odd lots, including one of about 134 cases, were still upon the market early this week, with every prospect of being brought under the hammer "without reserve" at the next drug-auctions. But we hear that the firm above referred to have now also secured control of these floating parcels. This will be pleasant news to holders of Solazzi-juice. An announcement relating to the matter will also be found in our "Business-changes" column.

The British trade in this article has dwindled sadly of late years, until now all that is left of what was once a fairly good business are a few small orders from the colonies and South America. At one time large quantities of both Maltese and Mogadore cumin-seed were bought from England by the Continent with which to flavour cheese and black bread. Now, not only are these purchases made direct from the producing countries, but Hamburg competes with us for the transatlantic orders. The interesting feature of the article to note at present is the failure of this year's crop in Fez, the district of Morocco where the principal supply of what we call *Mogadore* seed is produced. The inhabitants of Fez use a considerable quantity themselves as a condiment, and are drawing on the stock of their neighbours to such an extent that the price has risen there to 30*s.*; and, in consequence, not a single package has been shipped for the last six months from Morocco to England, where the price is only 23*s.* per cwt. The Maltese crop is reported to be of average quantity, but of poor quality. The price to-day in London ranges from 25*s.* to 30*s.* This time last year the value was about 4*s.* higher.

The Mincing Lane market has up to the present remained strangely indifferent to the announcement that synthetic indigo is a commercial article. It is true that at the last public sales of East Indian indigo there was a temporary scare, partly as a result of the news of the new competition, and that the bulk of the indigo offered was bought in; but as the auctions proceeded confidence appeared to be restored, and since then a fair business has taken place. Privately Bengal and Kurpah indigo have been sold at fully the rates of the October auctions. The Calcutta indigo-season opened last week, and it is reported that small sales of *Oude* and *Tirhoot* indigo have been made, the former at from 10*r.* to 15*r.*, the latter at about 20*r.* decline on the last season's prices. The general opinion in "the Lane" seems to be that even if synthetic-indigo has come to stay, it cannot beat the plant indigo so long as it remains higher in price. On the Continent, however, indigo-dealers seem to be more inclined to take the new-comer seriously; and we think that the English trade would do well to remember that when aniline dyes first began to make headway, their arrival was received with equal scepticism as is now displayed towards artificial indigo. At that time lac-dye, cochineal, madder, and safflower were staple articles of commerce in Mincing Lane, and many firms made large profits out of trading in these goods alone. At present lac-dye is unsaleable at any price; madder and safflower are hardly ever seen, and cochineal has sunk to the rank of a fifth-rate product. The stock of indigo in London is extremely heavy.

Cinchona Dividends. The Cinchona Cultivation Company *Pasir Nangka*, of Java, has declared a dividend for the last year's trading of 13½ per cent.

Our Hamburg correspondent wires on Thursday afternoon that *H.G.H.* oil of peppermint is firmer at 5½*m.* per kilo. *Currauba wax* is also firmer. Camphor offers at 25-250*m.* per 100 kilos.

Our New York correspondent telegraphs on Thursday evening that opium has been advanced to \$2.85 per lb. *Hydrochlorate of morphia* has also been advanced 10*c.* per oz. There have been small arrivals of *Copaiba balsam*. *Maracaibo bark* is offering at 37*c.* per lb. *Balsam tolu* is slightly easier, good quality being offered at 40*c.* per lb. *American oil of peppermint* H.G.H. can be had at \$1.05 per lb. for finest bulk oil. *Oil of spearmint* is quoted at \$1 per lb., and *Curacao aloe* are firm at 3*c.* per lb.

ACID (CARBOLIC) is very firm, with an upward tendency. *Crystals*, 39° to 40° *°F.*, 7½*d.* to 7¾*d.* per lb.; 34° to 35° *°C.*

7½d. per lb.; *Crude*, 60 per cent., 2s. to 2s. 1d.; 75 per cent., 2s. 7d. to 2s. 8d. per gallon; and *Cresylie*, 95 per cent., 1s. to 1s. 1d. per gallon.

ACID (TARTARIC).—Dull of sale. English (B.P.) brands may be had at 1s. 1d. to 1s. 1½d. per lb. on the spot; foreign (not guaranteed), at 1s. 0½d. per lb.

ALCOHOL.—German potato-spirit of good brands is still very low in price—at any rate, for prompt and winter delivery—viz., 6¾d. to 7d. per gallon in bond, naked, c.i.f. terms; but for delivery in the early summer of 1898 from 7½d. to 7¾d. per gallon, c.i.f., is asked for the same brands.

ALUM.—Mr. Walter J. Crook and Messrs. W. Caudery & Co., who represent the principal alum manufacturers, have written to us to point out that our statement of last week scarcely represents the exact position of prices of alum in London, which are as follows:—5l. 7s. 6d. per ton for loose lump, 5l. 5s. for ditto in tierces, and 5l. 15s. for ground in bags.

BELLADONNA ROOT.—Good quality still remains scarce. For good continental root 42s. 6d. to 45s. per cwt. is quoted on the spot with little offering.

BUCHU LEAVES.—The *Dunvegan Castle* has brought 17 bales from Cape Town.

CAMPHOR (CRUDE).—*Formosa* rather dull at from 90s. to 95s. per cwt., c.i.f. terms. The latest mail reports from China state that the market is very firm. *Japanese* camphor offers at 97s. per cwt., c.i.f. terms, but there is little business to report.

CAMPHOR (REFINED).—*Japanese* can be had on the spot at 1s. 3½d. to 1s. 4d. per lb. *English* and *German* unchanged.

CASCARA SAGRADA.—There has been no change in the quotation for some six weeks. Fair quality may still be had at 17s. per cwt. on the spot.

CINCHONA.—Our Amsterdam correspondent writes that the exports of Cinchona bark from Java for the month of November amount to 494,500 kilos. The following figures show the totals for the past five years up to the end of May:—

	1897	1896	1895	1894	1893
	Kilos.	Kilos.	Kilos.	Kilos.	Kilos.
Month of Nov. ...	494,500	454,500	632,000	404,810	363,000
Jan. 1—Nov. 30..	3,739,500	4,594,500	4,096,850	4,193,350	3,475,500

CINCHONIDINE.—The price of *Howards'* brand has been raised to 1s. 3d. per oz. for the pure alkaloid, 10d. per oz. for cinchonidine sulphate in tins, and 11d. per oz. for ditto in vials. For wholesale quantities under 25 oz. 2d. per oz. extra is charged. German cinchonidine in bulk is quoted at 8¾d. per oz.

CINNAMON.—The usual quarterly sales were held last Monday, when 3,043 bales were offered. Of this quantity 2,420 bales were sold; fine qualities met with a spirited competition and realised 2½d. per lb. advance on prices paid three months ago, while the ordinary assortment ranged from ½d. to 1d. lower. The finest lot in the sales was not knocked down until 2s. 4d. had been bid, a price which has not been paid for cinnamon for years. But this was exceptional, the next highest price being 1s. 7d. for very slightly inferior quality.

COCA-LEAVES.—Dearer and getting scarce. A good many sales have been made lately. Brown *Huanoco*-leaves have been sold at 6d. per lb., but more money is now asked. For good to fine green *Truxillo* from 8d. to 10d. per lb. is asked on the spot, according to holder.

COCAINE.—Firm. *Hydrochlorate* may still be had at 10s. 6d. per oz. in bulk from the German factories. *Howard's* brand in 1 oz. bottles is quoted at 15s. per oz., ditto pure cocaine crystals at 17s. 6d. per oz. *Zimmer's* price is still 10s. 6d. per oz., but Merck's brand has been raised to 10s. 9d. per oz. this week.

CREAM OF TARTAR.—Is slightly firmer this week. The quotation for best white *French* crystals is 71s. per cwt. f.o.b. Bordeaux, or 74s. to 74½d. on the spot. Powder is generally quoted at 76s. to 78s. per cwt., but in one quarter we hear of a quotation of 75s. 6d. per cwt., spot terms.

ETHER.—The prices of ether from pure spirit have been re-

duced. *Howards* now quote B.P. ether, s.g. 735, at 4s. 4d. (a reduction of 2d.); pure B.P., 720, at 5s. (a reduction of 1d.); rectified, s.g. 750, at 4s. 2d. (a reduction of 3d. per lb.). Other kinds remain unchanged: B.P. pure, from methylated spirit, 1s. 8d.; methylated, 730, 7¼d. to 7½d.; methylated absolute, sp. gr. 717, 1s. 3d. per lb. This change is rather unexpected. In Germany the price of ether has lately been downward (of course, the same raw material is not used there), but there are now indications that a different tendency will shortly prevail.

GALLS.—*Persian* are in very limited demand, but firm so far as holders are concerned. For good to fine blue the quotation is from 52s. 6d. to 57s. 6d.; green, 45s. to 50s.; white, 42s. 6d. to 45s.; sorts, 50s. to 51s. per cwt. *Chinese* galls have been in better demand for arrival, with sales of about 1,000 cases, December-February steamer at 55s. 6d. to 56s. 6d. per cwt. c.i.f. terms. At auction on Tuesday 300 cases of fair quality were bought in at 67s. 6d. per cwt. There is no business to report in *Japanese*, which are offering nominally at 55s. per cwt., c.i.f. terms.

GLYCERIN.—The parcel of nine cases of *Lever's* glycerin, mentioned in our issue of 27th ult. as having been sold very cheaply at 40s. per cwt. at last week's drug auctions, was brought forward under peculiar circumstances, probably known to several people in the sale-room. The manufacturers had nothing whatever to do with its sale, and the price it realised is considerably below their lowest wholesale quotation, and should not be taken as an indication of the real market value, either of the brand referred to or of double-distilled s.g. 1,260 glycerine in general.

INSECT-FLOWERS are declining in price, notwithstanding the announcement that American firms are beginning to buy at Trieste. For closed flowers the quotations range from 110s. to 116s.; half-closed, 75s. to 80s.; open, 57s. 6d. to 67s. 6d. per cwt., c.i.f. terms.

IPECACUANHA.—*Brazilian* root has been very firm during the week, 6s. 6d. to 6s. 7d. per lb. being quoted for fair quality. To-day the market is higher, one of the brokers having raised his quotation to 7s. per lb. Of *Carthagena* root, only one bale of good quality is now reported to exist in first hand. It is held for about 5s. 10d. per lb.

JALAP.—In New York the market on November 20 was described as "flat, without inquiry." There were about 60 bales in stock in the first hand, and the importer's quotation was from 9½ to 10½ cents. per lb.

KOLA NUTS.—Good *West Indian* are obtainable at 6d. per lb. on the spot.

MASTICH is firmly held. Good bright new tear is said to have been sold this week at 2s. per lb. Quotations are quite 25 per cent. dearer than last year.

MENTHOL.—Business has been done at 7s. 3d. per lb. this week in fair wholesale quantities, but 7s. 6d. is asked and obtained for single-case lots. Mail reports from Japan quote as high as 7s. 9d. per lb., c.i.f. terms, December-January shipment.

NAPHTHA.—It seems that it would be difficult to effect actual purchases of *Wood-naphtha* at 3s. 3d. per gallon for next year's delivery. It is true that that price is quoted (or was quoted last week) by a firm of foreign agents, but whether bids (had they been forthcoming) would have been accepted is, at least, doubtful. The general quotation is 3s. 6d. per gallon, and at that price business is said to have been done. The present tendency of the market in all wood distillates is upwards, because one of the principal distilleries in Germany was recently destroyed by fire. *Acetate of soda* may go dearer, and so may *Acetone*, for which a British Government contract for 50 tons (a smaller quantity than usual), will be placed within a few days.

NUX VOMICA.—The *Clan Maclean* has brought 645 bags in two consignments from Calicut and Mangalore.

OIL (COD LIVER).—In slightly better demand this week, though at unchanged prices. Small sales of good brands of *Lofoten* oil have been made at from 72s. 6d. to 75s. per barrel on the spot, according to quantity. *Finnmarken* (not guaranteed non-freezing) is offering at 70s. per barrel on the spot. Stocks in Norway are now gradually diminishing.

OILS (ESSENTIAL).—*Oil of Star-anise* is steady on the spot with a firm undertone. A little business is reported at 7s. 7½d. per lb., but to-day 7s. 6d. per lb. is said to have been accepted, a figure which was refused yesterday. *Oil of lemon* is without change, and can be had at from 3s. to 3s. 9d. per lb., f.o.b. terms according to quality. The tendency is, if anything, downward. *Oil of sweet orange*: Several dealers are without quotations at the moment. The crop is likely to be a short one, and prices may be advanced in the near future. *Oil of bergamot* is reported slightly firmer. Good brands are offering at 8s.; ordinary down to 6s. per lb., f.o.b. terms. *American oil of peppermint* is slow of sale. H.G.H. still offers at 5s. 6d. per lb., landed terms. *Japanese Peppermint oil* 40 per cent. is offering at 5s. per lb. on the spot, and at 5s. 7½d. c.i.f. terms. *Dementholised* can be had at 3s. 3d. on the spot, or at 3s. 10½d. per lb. c.i.f. terms. Mail reports received this week from Japan state that the peppermint-crop is a failure. It is estimated at about half that of last year. *Cassia oil* is quiet and unchanged at our last quotations. *Lemongrass oil* has taken another upward turn. A large business has been done this week; from 6d. up to 8d. per oz. is said to have been paid on the spot, and in some quarters 10d. is now talked of as the nearest price. *Oil of cajuput* is much dearer. Recently 4s. 9d. per bottle was quoted for good quality, but to-day as much as 5s. 6d. is asked. One English distiller has advanced *Oil of buchu* to 80s. per lb., but others still quote 48s. *Oil of dill-seed* has also been raised to 10s. or 11s. per lb., according to holder, and *Oil of pimento* to 12s. per lb.

OPIMUM.—*Persian* continues to sell steadily at full prices, from 10s. 3d. to 10s. 9d. per lb. being paid for finest and 9s. 6d. to 10s. per lb. for medium to good quality. *Turkish* has also been in good demand at advancing prices. Finest *Selected* is quoted at 9s. 3d. per lb.; *Current tale quale*, 8s. 9d. per lb. It is reported that American buyers have been operating, which has, to a certain extent, improved the market. *Soft-shipping* opium is without change, at our previous quotations.

PISTACHIO NUTS.—Have been advanced to 2s. 9d. per lb. this week in consequence of the increased demand. Reports from abroad state that the crop is likely to be a short one this year.

POTASH SALTS.—*Chlorate* is unchanged at 3½d. per lb. in London and 3¾d. per lb. for Liverpool for immediate delivery. English *yellow prussiate* is firm at 6½d. per lb., usual terms. *Bichromate* is offering at 4d. to 4½d. per lb. *Cyanide* maintains its firm position at 1s. 2d. to 1s. 3d. per lb. on the spot, but 1s. would be accepted for next year's delivery.

QUICKSILVER.—The market remains very quiet at 7l. per bottle from the importers, and 6l. 18s. to 6l. 18s. 6d. from second-hand holders.

QUILLAIA BARK remains very firm on the spot, from 24l. to 25l. per ton being the quotation. But for arrival much lower prices are made, viz. 19l. per ton c.i.f. terms for March shipment, and 21l. c.i.f. for nearer at hand. The new crop is now on the way, and there is every prospect of a downward course of prices.

QUININE.—Manufacturers' quotations are unaltered, several of them being merely nominal. Messrs. *Honards* do not give any quotations. The speculative market has been extremely dull, 1s. 2½d. per oz. is the quotation for *German* brands in bulk, but 1s. 2½d. per oz. might be accepted for an odd lot or two.

SACCHARIN.—The quotations of the Saccharin Corporation remain unchanged, but notwithstanding the vigour with which the organisation are vindicating their trade mark rights, one hears a good deal of offers of saccharin at very low prices. No one, of course, admits having purchased the article or knowing anyone who has done so, but it must not be lost sight of that saccharin is not a bulky article and can be easily smuggled, however perilous such a proceeding may be. In Germany there is undoubtedly a great over-production of saccharin, and prices are being cut very low, 1:300 or 1:350 quality being listed at about 15s. The condition is made that such saccharin shall not be sold to the United Kingdom or Canada, but once a parcel has passed into the hands of third parties, it is difficult if not impossible to keep an eye upon its shipment.

SAFFRON.—Still declining in price. Orders are being booked at lower rates. Fine *Valencia* is quoted according to holder, at from 33s. 6d. to 38s. 6d. per lb.

SEEDS (VARIOUS).—*Anise* steady. Russian to arrive too dear for this market at present. Greek sells at 18s. 6d. per cwt.; Spanish offers at 30s. per cwt. *Cumin-seed* firm, but very little business passing. At auction 115 bags were all bought in privately. Malta sold to arrive at 23s., and Mogador on the spot at 19s. 6d. to 23s. for dusty to fair clean. Fine Malta is held for 28s. to 30s. per cwt. *Fenugreek* sells steadily. About 200 bags Moroccan have changed hands recently at 11s. 6d. to 11s. 9d. per cwt., and 12s. 6d. is now the price. *Fennel-seed* is dearer; the price of Turkish is 16s. 6d. per cwt., c.i.f. terms. *Caraway* steady at 19s. to 20s. per cwt. for dark to fair Dutch. Twenty bags Russian sold at auction at 16s. 6d. *Coriander-seed* has risen in price, and there is a fair business doing in Moroccan at 9s. to 9s. 6d. per cwt., and in Tunisian at 8s. 6d. Sixty bags clean Italian in public sale sold without reserve at 9s. 6d. *Linseed* is firm, and sales have been made of dull bold Mediterranean at 40s. 6d. per qr., and of cleaned at 45s. *Canary-seed* slow of sale. Turkish is worth 25s. 6d. to 26s. 6d. per qr.; Mazagan, 34s.; and Spanish, 38s. to 42s. 6d.

SENEGA ROOT may be had on the spot at 1s. 4d. per lb.

SENNA.—The *Egypt* is expected to arrive at the end of this week, with 148 bales of *Tineelly* senna, which will be offered at the next drug auctions. Small sales of *Alexandrian* senna-leaves of fair quality have been made at 6½d. to 7d. per lb.

SPICES.—*Cochin Ginger* is still very dull, and 1,235 bags rough and washed rough offered at auction were all bought in, being practically unsaleable; 20s. was the best bid for a good parcel, for which the low price of 22s. would have been accepted. Bold cut *Cochin* is scarce, and sold well, 3 cases A at 100s. and 12 cases B at 72s. 6d. per cwt. No Jamaican offered. *Chillies* again easier; 35 bales dull red stalky Zanzibar sold without reserve at 29s. 6d. to 32s. per cwt.; for the remainder, about 200 bales, low bids were made, which were not taken. *Capsicums* dull; 79 bales bright red small Bombay were bought in at 25s. per cwt. *Cloves*, after being lower, close firm at 3d. per lb. for January-March delivery, and 3½d. per lb. for March-May. At auction 22 bales Zanzibar sold at 2½d. per lb. for fair and 2½d. for dark; 11 cases fair Penang sold without reserve at 6¼d.; 46 bags good Amboyna were bought in at 4½d. per lb. *Pimento* is quiet but steady; 554 bags fair ordinary were withdrawn at 3½d. per lb., 3½d. being bid. *Mace* steady, but little doing, 2 cases fine heavy Penang sold at 2s. 2d. per lb., and some West Indian at 1s. 5d. per lb. *Nutmegs* about ½d. per lb. lower; 3 cases Penang 65's sold cheaply without reserve at 2s. 4d., and 1 case 81's at 1s. 9d. per lb.; a few cases of shrivelled and defective sold at 6d. per lb., the remainder, about 100 packages, being bought in. *Black pepper* is rather easier; part of 214 bags Singapore brought 3½d. per lb. for fair. To arrive, a good business has been done at 3½d. for January-March shipment. *White pepper* very quiet; ordinary Singapore was bought in at 6¼d., dull *Coriander* kind at 7¼d., and fine bold in cases at 10d. per lb. Penang is offering to arrive at 5½d. per lb. January-March steamer, being lower. *Cassia lignea* is steady again after some cheap sales; 46s. 6d. is the quotation for old import. *Japan Ginger* is offering on the spot at 14s. to 15s. per cwt.

SULPHONAL is unchanged at 7s. 6d. per lb., though possibly business might be done at 7s. 3d. per oz.

VANILLA.—What is called the "Autumn Campaign" in the New York vanilla business has taken a very unfavourable course for the importers of Mexican beans, who have barely sold 30 cases, because they stood out for extremely high prices. It is not now likely that any further important business will be transacted until the middle of January. The climate and soil of Mauritius are excellently suited to the vanilla industry. Yet, notwithstanding the high prices of the product which have recently ruled and the depreciation of sugar, the staple crop of the island, vanilla-growing is declining in Mauritius. Between 1880 and 1887 the annual output averaged 39,900 lbs. In 1896 it was only 7,690 lbs.

WAX (JAPAN).—Is in fairly good demand. Business has been done on the spot at 38s. per cwt., but for December-

January shipment, 34s. per cwt. c.i.f. terms would be accepted. There is no business to report in this position.

Heavy Chemicals.

The heavy chemical-market still continues on the quiet side, and, with the exception of a few products, in which business is fairly brisk, there is little or no alteration to report. The position of bleaching-powder for delivery over next year is still rather unsettled. At present there is no material change from the prices already mentioned, but it seems likely that when a change does take place an advance will have to be recorded, and not a decline. *Soda ash* and *Soda crystals* are firm, and rather scarce. *Caustic soda* is not moving quite so briskly, but prices remain firm and unchanged. *Ammonia alkali* very steady. *Chlorates of soda* and *potash* remain nominally unchanged, but have only a weak tone, and demand is poor. *Yellow prussiate of potash* firmly maintains its strong position. *Cream of tartar* tends lower: powdered 76s. to 78s., and crystals 73s. 6d. *Sulphate of ammonia* has not maintained its position, and prices are now distinctly lower again. *Beckton*, 8l. 17s. 6d.; *Beckton terms*, prompt, 8l. 12s. 6d.; *Hull*, London and Leith, 8l. 15s. A further decline is also to be reported in quotations for *Sulphate of copper*, to 15l. 17s. 6d.; *Anchor*, 16l. 15s.; *Liverpool*, 16l. 2s. 6d.; and January-April delivery, 16l. 10s. *Alum* and *Sulphate of alumina* are in better demand, and tend a trifle higher. *Carbonate of alumina*, and *Aluminate of soda* dull. *Barium products* on the whole are moving fairly briskly, and the *Chloride* and *Carbonate* are particularly firm in price. *Brown acetate of lime*, owing to continued brisk demand and the high rates of freight being maintained, continues very firm. For prompt shipment there is still very little offering, but fair quantities are reported as being on the way from America. *Acetates of lead*, both white and brown, but especially the latter, have a very firm tone, and prices are steadily maintained. *Recovered sulphur* scarce and firm. *South Durham salt* moving briskly at unchanged rates. *Linseed and cotton-seed cakes* in good inquiry at firm prices.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on December 1, reports that an easier tone prevails in the market for *Castor oil*. The price now quoted for good seconds *Calcutta* is 3½d. to 3¾d. per lb., and rather more business has been passing at the reduced figures. For *French castor oil* the downward movement has continued, first pressure French being held for 3½d. per lb., and good second pressure is quoted 3¼d., but very little of this grade offers at the moment. In all grades of *Honey* there has been a decidedly strong upward movement, and the lower grades of *Chilian* are in good demand for export at prices ranging from 23s. 6d. to 25s. per cwt., while pile X. is held for 23s. 6d. to 30s. per cwt. according to quality. Sales of *Chilian beeswax* are reported at about 6l. 10s. per cwt., with further inquiries, and lower prices are being refused by holders. *Sulphate of copper* is steady at 16l. 5s. to 16l. 10s., according to position. *Cream of tartar* is steady, at prices varying from 77s. to 80s. per cwt., according to quality. *Russian Anise* is held for 18s. per cwt., with not much business passing at the moment. *Gum Acacia* sorts are offering at previous prices, and there has been a good quantity sold, certain buyers showing more interest in the article. Full prices are being paid for *Brazilian*, and a fair supply of this kind is now obtainable. A recent arrival of 100 packages of *Scammony root* offered from the quay was sold on private terms, the price not being allowed to transpire. *Sierra Leone Chillies* do not offer much temptation to buyers, as the prices are hardening every day, and 40s. to 45s. is now the price of the best grades offering. *Kola-nuts* offer no new feature; business of a retail character continues to be done in them at late rates.

The Hamburg Drug-market.

Our Hamburg correspondent reports that the drug-market is very quiet this week, and few changes have taken place since last week. *Antimony* is quoted to-day at 38m. to 39 m. per 100 kilos. *Agar-Agar* is quiet at 270m. per 100 kilos *Cape aloes* unchanged at 48m. per 100 kilos, with little

business. *Balsam Peru* is steady at 18m. per kilo.; on the spot there is very little to be had. *Tolu* quiet and easier, prices being more in buyers' favour at 4m. per kilo. *Citric acid* is dull of sale at 237m. per 100 kilos. *Tartaric acid* is without change at 225m. to 240m. per 100 kilos. *Russian anise* is offering for spot delivery at 40½m. per 100 kilos., but without animation. *Refined borax* is very quiet at 30m. per 100 kilos. *Camphor* is steady, but slow of sale: spot delivery is quoted at 260m.; April-May, at 262½m. to 265m. per 100 kilos. New crop *Cassia lignea* is offering at 77m. to 78m. per 100 kilos., while fine old is held for higher prices. *Mogador Coriander-seed* is unchanged at 14½m. per 100 kilos. *Coca leaves* are firm at 135m. per 100 kilos. The stock in Hamburg is small. *Ergot of rye* is also firm; there are no sellers below 170m. per 100 kilos. *Galangal* is quiet, at 38m. to 40m. per 100 kilos., as also is *Gentian-root* at 46m. per 100 kilos. *Menthol* is unchanged: 15½m. per 100 kilos. has been paid this week, and 16m. is now asked. *Crude cocaine* is a shade easier, but the factories quote the same price for *Hydrochlorate* (pure) as last week, and do not seem disposed to book large orders. In *Oils*, *cod-liver* is slow of sale; non-congealing oil offers 68m. per barrel. *Castor oil* is firm for immediate delivery; first pressing is held at 63m. per 100 kilos in barrels, while December is quoted 62m., January 61m. per 100 kilos. *Rape oil* is quiet, at 58½m. per 100 kilos., in barrels, duty-free. In *Essential oils*, *Cajuput* is very scarce and firmly held, to-day's price for spot delivery is 120m. per case, while December delivery has been sold at 105m. per case. *Clove oil* is firm, at 5.50m. per kilo. *Russian anise oil* continues firm, at 16½m. per kilo. *Star-anise oil* is quiet and unchanged, at 16m. per kilo. *Citronella oil* is easier, and can be had 2.70m. per kilo. *Peppermint oil* is quiet: HGH offers at 5½m. per lb., Japan oil at 6½m. per kilo. *Quillaia bark* is tending lower; the new crop has turned out better than was expected; December-January shipment can be bought at 35m. to 37m. per 100 kilos. *Quinine*: The manufacturers' quotations are unchanged, but second-hand would accept a little less. *Star-anise* remains firm at 195m. to 197½m. per 100 kilos.; the stock here is only small.

The Amsterdam Cinchona-market.

The 8,216 bales and 627 cases of Java cinchona-bark to be offered by auction at Amsterdam on December 9 weigh 753,859 kilos. According to analysis, they contain the equivalent of 40,793 kilos. of sulphate of quinine, or an average of 5.61 per cent. The tone of the market remains extremely firm. On Tuesday, December 7, 42 tons of cocoa-butter will be offered for sale at Amsterdam. These include 10 tons of "Hammer" brand (Dutch), 10 tons of "Helm" brand (Dutch), nearly 5 tons of "Holland" brand, 9 tons of Snachard's (Swiss), and 7½ tons of "Mignon" brand.

The Bergen Cod-liver Oil Market.

Our Bergen correspondent, writing on November 23, reports that the market is slightly easier, partly because of lower offers from the Northern towns. The quotation, however, is nominally the same as last week—viz., 67s. per barrel, f.o.b. terms. The shipments from Bergen up to date are 9,635 barrels, against 5,433 barrels at the corresponding period of last year.

The Smyrna Opium-market.

Our Smyrna correspondent writes on November 20 that the opium market was excited early in the week under review, reports being current that the frosts had destroyed the autumn plants in the interior districts. Speculative buyers at once came forward and bought all that was offering—viz. 40 cases—after which holders advanced prices 3d. per lb. Since then, however, the weather had turned mild again, and the news from the interior not having been confirmed, all speculation has ceased. On Thursday the market was again very quiet, with a tendency to drop to last week's prices. From another source we hear that the sales for the week ending November 20 amount to 40 cases, consisting of 35 cases *Talequale* at the parity of 7s. 2d. to 7s. 6d. per lb., and 5 cases choice *Ierli Talequale*, at 7s. 9d. to 7s. 10d. per lb., f.o.b. Smyrna. The arrivals have been 2,950 cases against 1,179 cases at the corresponding period of 1896.



In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

The P.A.T.A. Controversy.

SIR,—When I penned my last letter to you it appeared to me that Mr. Jones would either have to cry “peccavi” or endeavour to wriggle out of the awkward corner in which his own want of candour had placed him. As I anticipated, he has taken the latter course, which, in effect, involves the former, with the additional discredit of further disingenuousness. When a man who has given publicity to “statements, deductions, and suggestions which are wholly or partially false” is called upon to either justify or withdraw them, and refuses to do either, no honourable man will be at a loss to know how to characterise his public conduct. The pretence that he does not understand, the plea that he does not wish to make a “confidant” of those whom he has misrepresented, are excuses too flimsy to deceive anyone. I have no wish any longer to cross swords with an opponent whose only idea of a fair fight seems to be to stab in the back and then run away. Before retiring from the controversy I should like briefly to summarise the points discussed. In spite of the denial in Mr. Jones’s last letter, I could easily prove from his own words that he has again and again tried to convince his supporters that we could not obtain a supply of P.A.T.A. articles; indeed, in that very letter he says that we can only obtain “a handful.” I have asked him to prove these assertions, but he has been utterly unable to do so for the simple reason that, whatever his information may be, *they are false*. I gave him the best opportunity of testing the matter that I could devise, but he runs away with the remark that 1,000l. worth of P.A.T.A. goods is nothing to boast of! A few weeks ago he was nevertheless shocked at the “reckless buying” indicated in my statement that we had during the time we had been on the black-list purchased several thousand pounds’ worth of such articles, a large part of which were still in stock. He has declared, and, in spite of the obvious absurdity of the statement, again and again repeated, that “very few of our undersold P.A.T.A. articles reach our ordinary customers”; but he cannot explain why we should sell them to his “army,” or his “three families,” and refuse them to our 65,000 customers per week; for the statement, whatever he may base it upon, is *absolutely untrue*. He has boasted that he could buy up our stocks in a week. Month after month passes by, but, though he persists in pretending that his “army” and his “three families” could easily do it, it has not been done. We hold more than 1,000l. worth of such goods at the present moment, and Mr. Jones has not “bought them in,” simply because it is impossible for him to do so. When, some time since, certain of his manufacturers refused to be bound by his “cast-iron code of regulations,” and sold their goods to those who would maintain minimum prices for them, without regard to the prices at which they sold other P.A.T.A. goods, what did Mr. Jones do? He endeavoured, by “hysterical” appeals and “frantic” efforts, to prevent this course from being adopted, but without avail. His efforts in this direction having completely failed, he then had the hardihood to write to your journal and graciously inform me that, so far from this procedure being an indication of the defeat of the P.A.T.A., it was a sign of victory, and that this was a course which he had encouraged and approved “for months past.” *This was not the case*. Mr. Jones, however, determined to make the best of a bad matter, and to applaud what he had hitherto fought against “tooth and nail,” whereupon a number of his best manufacturers made offers of their goods accordingly; but, shortly after, Mr. Jones and some of his friends discovered that this glorious victory meant absolute defeat! Mr. Jones is equal to the occasion. He publicly calls upon *one only* of these numerous

manufacturers to withhold supplies from *one only* of the numerous firms whom they supply upon these terms, and then writes to your journal contradicting what he had said in his previous letter, and trying to persuade your readers not only that he had never approved or even permitted offers of that kind to be made, but also that P.A.T.A. goods were not being supplied to those who cut the prices of other P.A.T.A. articles. *This also was untrue!* I challenged him to prove his statement to be correct, or to sacrifice something if I proved it to be incorrect (of which I hold the most convincing evidence), but he very prudently declines the challenge. There is scarcely a statement of any importance that Mr. Jones has made during this controversy which is not either untrue or, if fairly interpreted (for Mr. Jones has generally a double meaning in reserve), which is not calculated to convey a false impression. Such a tortuous policy is unworthy of a fair and honourable opponent, and cannot fail to render him not “frantic” but indignant; and were I to join the P.A.T.A., as Mr. Jones suggests, so far from understanding and approving their “every action,” I should most certainly resent and denounce such untruthful and crooked courses. In future it will be impossible for me to believe anything that Mr. Jones says respecting this matter, *merely because he says it*. I do not believe, for instance, that his want of straightforwardness and candour in relation thereto has “given satisfaction” to his supporters, most of whom are certainly fair and honourable men, and not wholly blinded by prejudice. I care comparatively little about the P.A.T.A., but I trust that I have some regard for truth and justice. I am equally indifferent as to the “plans” the P.A.T.A. may adopt, but I do want the truth to be told about those that are publicly announced. It was with the hope that I could induce Mr. Jones to meet the case straightforwardly that I took the trouble to write these letters. My object in putting the points at issue, clearly and definitely, was not to “draw” Mr. Jones. I have no wish to do so, beyond what is absolutely necessary to demonstrate the truth and fairness of public statements and public acts; but Mr. Jones shirks inconvenient inquiries, and evades inconvenient proofs. Let those who can rely upon Mr. Jones’s bare assertions in future do so, but for my part, I feel that, with regard to this matter, they are not to be trusted. Only such assertions now remain against my proof and offers of proof, and not one statement that I have made or proof that I have offered has been shaken. Under these circumstances I now withdraw from the controversy, and do not intend again to enter upon it, unless we are again attacked, as we were in this instance.

I think it is due to Mr. Jones and to myself to take this opportunity of saying that in this and all previous letters I speak of Mr. Jones in his public capacity alone. I have not the pleasure of a personal acquaintance with Mr. Jones, but I do not for one moment suppose that he would in private life be betrayed into such ill-founded statements as he has made as secretary of a “fighting organisation,” and which are probably due to excess of zeal, the heat of controversy, or the exigencies of a difficult position.

Thanking you for your courtesy,

I am, dear Sir, yours truly,

4 St. Lawrence Road, Southampton, WILLIAM DAY.
November 29.

SIR,—Mr. Beecham opens his last letter by saying “Mr. Glyn-Jones drew me into this correspondence.” I am sorry to have to take exception to this statement. Mr. Beecham himself started the correspondence in your issue of October 2. He announced that he had taken steps at Southampton to fix minimum retail prices by means of mutual agreements arranged amongst “the trade” at Southampton. He gave the prices arranged and offered to send printed forms for similar mutual agreements in other centres. He also threw out the suggestion that other proprietors might follow suit. I felt it was part of my duty to go into these matters, and wrote pointing out—(1) that the arrangement was only agreed to by the cutters of Southampton, and that “the trade,” as a whole, had not been consulted, and were opposed to the arrangement; (2) that the gross profit so fixed (under 10 per cent. on 5l. parcels) was utterly inadequate; (3) that the difficulty could be best solved by Mr. Beecham adding his pills to the P.A.T.A. list. I was careful to give Mr. Beecham fullest credit for what I considered was

an honest attempt on his part to recognise the just claims of his distributors. Mr. Beecham then declared himself anxious to thrash the question out and to see the matter through. The points at issue between us were—(1) As to what constituted a fair profit; (2) the practicability of maintaining fair profits. On the first point, Mr. Beecham argued that 10 per cent. on his article was a fair profit, and as to the second pleaded inability to fix prices. To both these answers I respectfully took exception, and asked Mr. Beecham two questions—(1) Would he consult the trade as to what they considered a fair profit, and as to how that profit would be best secured? (2) Would he act upon the wishes of the trade when he was made aware of them?

Mr. Beecham's reply to that letter did not deal with those questions, but was an attempt to prove that our work was a failure. I again repeated the questions, pointing out that if our plan had failed, Mr. Beecham could adopt an individual scheme such as Mr. Elliman's.

Mr. Beecham now replies to the questions. He says he already knows what the wishes of the trade are—namely, "the majority naturally want all the profit they can get"; "some say they will be satisfied with a living profit which they cannot get." Then he adds, "I am well aware how utterly impossible it would be for any firm to act upon these wishes in most cases."

I am glad Mr. Beecham is convinced that the majority of the trade are not satisfied with the 7·7 per cent. his mutual agreements would allow them, though I am sorry he says he is sure it would be impossible for him to allow them more, especially because he admits my contention that prices have been effectually regulated in the past. Mr. Beecham says, "I am aware that Messrs. Elliman have for many years restricted the selling price of their embrocation." That is all my case. We ask Mr. Beecham now to do for us what he says he knows Messrs. Elliman have done for many years. I suggested the P.A.T.A. plan because it would save trouble not only to Mr. Beecham, but to the trade. Mr. Beecham does not like our plan, but bears unqualified testimony to the efficacy of Mr. Elliman's scheme. The point that Messrs. Elliman have not restricted the prices of another article does not affect the question. They have not attempted to do so. Where they have attempted, Mr. Beecham says, they have succeeded. Mr. Beecham's reason for not guaranteeing living profits cannot, therefore, be that what we ask is impossible; but I think it can be found in the hint—given by him in one of his letters—that such a course might offend the public, and thus damage his sales. We cannot complain that Mr. Beecham takes the consumers of his pills into consideration; our point is, that we do not believe people take Beecham's pills, or any other medicines, because they are cheap. If Mr. Beecham decides to encourage cutting, so that the public can buy at the lowest possible price, he will have to reckon with the strongest opposition from the trade. I am certain that any advantage he may gain from the cheapness of his articles will be far outweighed by the result of the determined and organised attempts on the part of those who sell his pills to induce would-be customers into taking other medicines upon which a reasonable profit is made. We are in business to live. We must have a profit; and if Mr. Beecham cannot give us a profit on his pills, if he cannot help us, he cannot blame us if we help ourselves by discouraging in every legitimate way the sales of his unremunerative proprietaries. Mr. Beecham will, I hope, understand that the 3,000 members of the P.A.T.A. have no intention of singling out his article for special attack. What we say to him applies to all proprietors who cannot, or will not, give us living profits.

Referring briefly to Mr. Beecham's attack on the P.A.T.A., I can only say that, whether instructed to do so or not, Mr. Beecham's representative did pick four avowed opponents of the P.A.T.A.; and, if this fact is denied, will Mr. Beecham or his representative name the four shops he selected? I think Mr. Beecham will see that this much is due to me in the face of his suggestion that I was "hoodwinking" the trade when I made that statement.

I agree with Mr. Beecham when he says that no good can come of continuing the correspondence, and my only reason for writing this letter is that there may be no future misunderstanding. We (I venture to speak for the rank and file of the trade) claim the right of being consulted when

any proprietor attempts to regulate our profits. We ask for a living profit—our wage for doing the proprietors' work. Mr. Beecham says he does not need to consult us because he knows what we want, but that he cannot give it us, notwithstanding that he himself admits that others have done so. I respectfully maintain that we can only conclude Mr. Beecham does not want to give us living profits, and nothing can alter that conclusion except an attempt by Mr. Beecham, either through the P.A.T.A. or otherwise, to give us what we allege we have a just right to. It is useless saying it cannot be done; others have done it. If he puts his pills on the P.A.T.A. list, the trade will not blame him if there should be failure, but will then recognise an honest attempt on his part to deal justly with them.

Yours faithfully,

2 and 3 Stonecutter Street, W. S. GLYN-JONES.
London, E.C., December 1.

SIR.—Much has been said as to the disadvantages of "cutting," but what about its advantages? I consider the huge advertiser my best friend, for has he not built up a proprietary business for me? I consider myself as good a pharmacist as any who make pills, tablets, or emulsions, and as good a business man. Having all my own showcards and handbills, I neither show nor distribute others. Two pounds was offered me for one month for the use of my window, which I refused, believing it to be worth twice as much to me. If manufacturers will persist in standing in their own light, chemists can make them a stepping-stone. I am at all times willing to supply other people's goods when asked for if there is a margin of profit upon it at all, but that does not prevent me from pushing mine; but surely it would be much more pleasant for all concerned if manufacturers would join the P.A.T.A. and make chemists their friends instead of competitors, for manufacturers can scarce have an idea of how much the chemist can stand in their way.

Yours sincerely,

November 29.

PAX. (23/32.)

The P.A.T.A. Price of Chlorodyne.

SIR.—An advertisement of Dr. Browne's chlorodyne has appeared in several chemists' price-lists, wherein the price quoted is below the P.A.T.A. minimum, and as these advertisements were inserted in spite of instructions to the contrary, I shall be obliged if you can spare space for appended letter from the printers of the lists. I should be sorry if an impression got abroad that I in any way support those who do not adhere to P.A.T.A. prices.

Yours faithfully,

33, Great Russell Street, Blooms- J. T. DAVENPORT.
bury, W.C., December 1.

[COPY.]

From A. T. Roberts, Son & Co.,
Advertisement Contractors,
5 Hackney Road, London, E.,

Mr. Davenport,
33 Great Russell Street, W. C.
November 30, 1897.

DEAR SIR,—In reply to yours, I have to express my very great regret that your distinct instructions with reference to the quotations of your goods in price-lists printed by us have been disregarded. I have gone thoroughly into the matter, and can only discover that the old prices have been left in from a former issue of the lists of which you complain, hence the error in reprinting.

I have now given instructions which I think will prevent the possibility of a recurrence.

I deeply regret the annoyance which has been caused by this carelessness on my part, as I can quite see the position in which you are placed by our errors.

I am glad to be able to authorise you to use in any manner you think desirable this letter, as certainly the blame of the mistake should rest entirely upon us.

Yours faithfully,
(Signed) CARLTON ROBERTS,
Trading as A. T. Roberts, Son & Co.

A Living Profit.

SIR.—The object of the P.A.T.A. (Retail Section) is to obtain a living profit by forcing up prices, and Messrs. Day and Boot, seeing a fine opportunity to advertise themselves by exposing the "ring," have taken up a position which is likely to prove prejudicial to themselves and all other drug companies. It is a matter of common knowledge that the

"stores" hold the bulk of the patent-medicine trade. They have catered for it and secured it. It follows that an additional 10 per cent. on these goods would mean an enormous increase in the dividends of the companies. Mr. Beecham, in his letter of November 13, mentions four firms, who collectively buy 10,000*l.* worth of his medicines per annum. An increase of 10 per cent. in the profits would mean, therefore, an average of 250*l.* additional profit for each firm on Mr. Beecham's medicines alone. Can Messrs. Day and Boot resist the glittering prospect? They have had the benefit of the "exposure," and the public would not now blame them for a rise in price, but would continue to patronise them. Let these two kings of the drug-trade, therefore, "stoop to conquer," and show their usual business shrewdness by considering how they can get the benefit of the proposed rise.

Do chemists suppose that the P.A.T.A. scheme will bring back the trade to them? If so, they are deceiving themselves. Hundreds of chemists charge the same rates as the "stores," and yet the public pass their shops and flock to the stores. So far from the scheme bringing permanent benefit to chemists, it is much more likely to prove the ruin of some of them eventually. The main hope of the chemist is either to establish a high-class business, which the "stores" cannot touch, or to get into a district which is too small for the operations of a big store. But if the stores make large profits, they will spend the bulk of the surplus money in opening new branches. New companies will rapidly be formed, and, as it will be possible to pay a fair dividend on a smaller turnover, it is clear that competition will become keener than ever. And, in order to attract the public, the "stores" will cut the prices of drugs still lower. The scheme of the P.A.T.A. will, if carried, bring a brief respite to chemists and a golden opportunity to the "stores"; but competition will soon reduce average profits to the old level. The struggle for existence becomes a trifle keener each year, and there is not much prospect of improvement so long as capitalists are satisfied with a 5-per-cent. dividend.

On these grounds, will not Messrs. Day and Boot reconsider their policy, and let us have a "season of prosperity," even if we know it cannot last? They would get more than their share of the golden harvest.

Yours truly,
A MANAGER OF A LIMITED-LIABILITY
COMPANY. (104/1.)

Chemists and Stores.

SIR,—I should like to bring forward an idea which I have not seen embodied by any of your numerous correspondents. It is the formation of an advertising fund amongst registered chemists to promote an advertising crusade against store companies. Why should not chemists spend a trifle to educate the public against the unjust trading and the illegitimacy of cash chemist companies? These companies periodically and persistently advertise in the towns where they exist, representing old-fashioned chemists as thieves. Individual chemists cannot spend a great amount of money in advertising against them. But I believe that were an advertising crusade set on foot by registered chemists in towns where stores exist, all the houses of those towns billed regularly every month—men being kept employed for that purpose—the public would be eventually educated to understand the difference between a chemist proper and these cheap traders.

Let the bill clearly state the office of a chemist, and against that let it enlighten the public concerning the tactics of the drug-stores, such as ticketing goods "2*s.* 6*d.*, our price 1*s.*," for an article which no chemist would think of charging more than 1*s.* for, paying countermen to substitute. If the chemist does not justify himself the public will believe the store-traders.

I believe such a scheme as I propose would benefit all registered chemists. It is at least worth consideration, and might with advantage be taken up by the P.A.T.A. It would give the trade a chance of defending themselves against the monstrous trash which emanates from the store-traders concerning them. I would be glad to subscribe a guinea a year to such a scheme. Yours truly,

AN ADVERTISING CHEMIST.

The Chemists' Club.

SIR,—Referring to the paragraph in the last issue of your journal, I beg to say that the firm through whose instru-

mentality the Chemists' Club was started, and, up to the present, mainly supported, think that the time has now arrived when the committee should, on behalf of the members, take over the entire management.

It is thought that the club, depending on one firm for support, has prevented the other wholesale houses from taking that interest in the club which was from the first expected, considering that the members comprise hundreds of chemists doing business with them.

The committee have now decided, while thanking "Cam-wal" for the trouble and expense incurred in starting the club, to take over the proprietary control from December 25 next, and to remove the club to the western district of London, in the vicinity of Regent Street. However, to make the club a decided success it will require, for the present, financial support, and for this the committee hope that the trade generally will lend them aid, as patrons, with annual subscriptions.

Mr. H. Davenport has kindly consented to head the list with 10*l.*, and from promises of assistance received the committee hope, with the aid of the trade generally, to make the club a financial success both as a social and a business club.

Cheques to be made payable to the Chemists' Club, and crossed London and Provincial Bank (Limited).

Yours faithfully,

C. EDWIN GARMAN,
2 Farringdon Avenue, E.C. Chairman of Committee.
December 1.

[We have been asked if we will acknowledge any subscriptions which wholesale or other firms may think fit to contribute towards ensuring the future success of the club. This we will do with pleasure. Moreover, we shall be glad to receive and place in the proper quarter, or publish if it should seem desirable, any suggestions towards making the club more useful to the trade generally.—ED. C. & D.]

Those Irish Suppositories.

SIR,—It is a matter of gratification to me to observe the interest which has been taken in the proceedings of our first meeting for this session, which interest, I hope, will be maintained.

In the matter of those "Irish Suppositories" your report was necessarily condensed, and it did not appear that in submitting them as "troublesome" I had intimated that on the first occasion I dispensed them without any difficulty, but on a repetition we failed in three attempts, and had tried the gelatine base without satisfactory results. As to Mr. Roberts's expression that "it is important that neither of the above decisions, emanating as they do from a learned body of men, should go unchallenged until verified," I agree; but I do not think they could be taken as "decisions," being only opinions expressed on exhibition of the prescription and without trial. My own opinion was that the hazeline should be combined mechanically, and my first and successful attempt was made with that idea. My process was: first placed mould on a 6-oz. bottle containing water and crystals of sodæ hypophosph. to chill, washed mortar and pestle in boiling water to heat, weighed 75 gr. ol. theobrom. and 5 gr. ceræ alb. and placed in water-bath, and 25 gr. ol. theobrom. in heated mortar, which softened it rubbed in the cocaine, morphia, extract (soft), and hazeline, in order named. The ol. theobrom. and ceræ alb. when melted were poured into mortar which was still warm (not hot), mixed under pestle, and poured into mould helping the last portion with spatula.

I cannot account for the subsequent trouble except by excessive heat. We have repeated them twice since successfully.

I enclose you two out of last batch, made on November 20. We tried one of this batch after making, by crushing between the fingers, and the liquid hazeline was quite visible. I also enclose two made on November 9 in another house. "The procedure was the same as described by Mr. Roberts," and two made with gelatine base by a third party on November 12. I shall be obliged if, on examination, you can report as to the relative value of hazeline in each. Yours truly,
Dublin, November 30. R. J. DOWNES.

Ideas.

SIR,—*Suppositories*.—It does not matter whether these are made by the cold or hot process unless the formula used is

correct; and, as I pointed out at a discussion on the new Pharmacopœia, held by the London Chemists' Assistants Association on October 14, 1887, the discrepancy in making "all, when finished, whether containing heavy or bulky powders, as iodoform and tannin, or a heavy ointment, as mercury, weigh the same—viz., 15 gr.," I hope to see this rectified in the new edition.

Steamy Windows.—I find a layer of sawdust spread along the top of window-enclosure, with strips of cardboard fixed over to keep it together, of service in preventing the moisture, condensed on window, from running down window inside enclosure.

Yours faithfully,

Bournemouth, November 29. W. BLAND BOTHAM.

MISCELLANEOUS INQUIRIES.

7/73. H. I. E.—Toilet-oatmeal:—

Powdered oatmeal ...	...	...	3vi.
Powdered orris-root ...	...	...	3iv.
Powdered soap ...	...	...	3iv.
Oil of bergamot ...	...	...	3j.
Ionone... ..	...	...	℥xxx.

Well mix. A small quantity to be mixed with a little warm water and well rubbed into the hands, afterwards washed off with plenty of warm water.

8/14. A. E. W.—Glycerole of papaine has been recommended for the purpose of removing Indian-ink stains. Is not that what you require?

8/35. A. E. D.—You might use up your mixture of 5 lbs. of neutral oxalate of potash and 1 lb. of "hypo." as an ink and iron-mould remover by powdering it up with 1 lb. of oxalic acid.

6/14. *Staffordshire.*—We published a formula for opalescent ammonia as recently as June 26, page 1,013.

5/49. J. S.—Grease-remover for 24 tins:—

Powdered quillaia-bark ...	...	...	Oz. 4
Bicarbonate of soda...	...	...	4
Ox-gall ...	...	...	4
Soft soap [ ...	...	...	8

Mix in a mortar.

6/8. *Wandsworth.*—It is said to be made by adding a little impure sulphuric acid to water.

6/58. *Oriental.*—The powder consists chiefly of powdered chiretta and gentian, with a trace of santal-wood and some other ingredients we cannot determine.

7/36. G. D.—If you add a small proportion of heavy petroleum oil to solution of stearine in benzine it will yield you a less volatile polishing-liquid.

11/11. *Ambitious.*—The Pharmaceutical Preliminary Examination (no matter when it was passed) is no longer recognised for the purpose of registration as a medical student.

78/7. *Blackasday.*—(1) To produce blonde hair from dark hair use a solution (10 per cent.) of peroxide of hydrogen. (2) *Single-bottle Hair-dye* for different shades:—

Argent. nitr. ...	...	...	3iv.
Cupri sulph. ...	...	...	3ij.
Aq. dest. ...	...	...	3vj.
Liq. ammonie ...	...	...	q.s.

Dissolve the nitrate of silver and sulphate of copper in the water and add liq. ammon. until the precipitate formed is redissolved.

This strength gives an intense black, and requires diluting for different shades of brown. Diluted with an equal bulk of water it gives dark brown and chestnut; with twice its bulk of water, light brown and blonde.

21/71. *Aberdeen.*—Do you mean a *Digestive Syrup*? If so, please refer to *C. & D.*, August 22, 1896, page 330, and *C. & D. DIARY*, 1897.

INFORMATION WANTED.

The Editor will be obliged for replies to the following from any who can furnish the information.

24/8. E. B. tooth-brushes, recommended in *Truth*: who is the maker or agent?

309/97. Who are the proprietors of chloro-naphthalin?

17/49. Information about the Drouet cure for deafness.

19/8. Where may crude sulphate of copper be best obtained in ton lots?

17/50. Austrian glue: where obtainable?

23/19. Who is the manufacturer of Myer's sprays?

Coming Events.

We insert notices of association and society meetings in this section free if they are sent to us, on postcards, by the Wednesday of the week before the meetings are to be held.

Monday, December 6.

Society of Chemical Industry. Chemical Society's Rooms, Burlington House, W., at 8 P.M. Paper: "The Sulman-Teed Process of Gold-extraction," by Messrs. H. L. Sulman and D. F. L. Teed.

Edinburgh Pharmacy Athletic Club.—Sixth annual smoking-concert at West-End Café at 9 P.M.

Tuesday, December 7.

Chemists' Aerated Mineral Waters Association (Limited).—Annual meeting at Anderton's Hotel, Fleet Street, E.C., at 3 P.M.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, at 8 P.M. Evening meeting. Subject: "Note on Some of the Official Extracts," by E. H. Farr and R. Wright.

Glasgow and West of Scotland Pharmaceutical Association, 94 Regent Street, at 9 P.M. Adjourned discussion: 1. "The Legal Seller where there is Absence of Indication." 2. "The Subjects Suggested by Plymouth Association per Federation of Associations." 3. "The Pharmaceutical Society and Pharmaceutical Organisation," by Mr. J. Anderson Russell.

Public Dispensers' Association.—Meeting at Trinity Church Schools, 252B Gray's Inn Road, W.C., at 8 P.M. Dispensers to infirmaries, hospitals, dispensaries, &c., are requested to attend.

Wednesday, December 8.

Brighton Junior Association at 9 P.M. Debate on the matters brought forward by the Federation of Local Associations.

Manchester Pharmaceutical Association, Victoria Hotel, at 7.30 P.M. Subject: "Handy Tests for Water-analysis," by Mr. C. Turner, F.C.S. Also discussion on the motion as to trade-organisation.

Thursday, December 9.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. Paper: "Some Mental Processes Employed by the Student of Science," by F. A. Hocking, B.Sc.

Midland Pharmaceutical Association, Grand Hotel, Birmingham, at 8.30 P.M. Trade Meeting. Mr. Glyn-Jones will deliver an address. All members of the trade are invited to attend.

Friday, December 10.

Aberdeen Junior Chemists' Association, 21 Bridge Street, at 9.30 P.M. Questions and hat night.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 P.M. Apprentices' night, conducted by David Harley.

Wednesday, December 15.

Chemical Society. Professor F. R. Japp, LL.D., F.R.S., will deliver the Kekulé Memorial Lecture, at 8.30 P.M.

The Irish Pharmacists' Assistants' Association have decided to offer book prizes, value 10s. and 5s., for the best anonymous essay on "An Ideal Pharmacy." The papers, which should not exceed ten minutes' duration, will be read and adjudicated upon at a meeting of the Association on December 10. The manuscript, accompanied by *nom de plume*, should be sent to W. Vincent Johnston, 35 Ranelagh Road, Dublin, at least one day previous to the meeting.



IRISH SUPPLEMENT TO THE CHEMIST AND DRUGGIST

No. 12.

SATURDAY, DECEMBER 4, 1897.

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Editorial Notes.

WE are pleased to note a good start to the evening meetings of the Pharmaceutical Society. The meetings are to be public or "lecture," and pharmaceutical or "private." The first private meeting was held at 67 Lower Mount Street, Dublin, on November 8, and although the programme was purely informal, several topics were discussed which involved practical difficulties in everyday work. The interchange of opinion on points of that nature is frequently of greater value than a debate upon an ethical or political question related to pharmacy. The clubable or fraternal spirit is generally lacking in pharmaceutical evening meetings; the discussions may be too formal, and it would be better if conversation rather than speeches were encouraged when compounding and similar pharmaceutical topics are before a meeting. The following are the arrangements for the remainder of the session:—

- December 13.—Private meeting.
- January 10, 1898.—Private meeting.
- January 31.—"Insects, and how to Catch, Preserve, and Classify them" (illustrated), by G. H. Carpenter, Esq., B.Sc.
- February 14.—Private meeting.
- February 28.—"The New British Pharmacopœia," by C. R. Tichborne, Esq., Ph.D., &c. (Contingent on the Pharmacopœia being published before this date.)
- March 14.—Private meeting.
- March 28.—"Pharmacy, the Handmaid of Medicine," by Dr. Hugh A. Auchinleck, F.R.C.S.I.
- April 11.—Private meeting.
- April 25.—Closing meeting.

In addition to the mother Society's start, we note that the Irish Pharmacists' Assistants' Association made a good beginning on October 29, and the Ulster Pharmaceutical Association on November 3, when Mr. W. L. Howie, Ph.C., F.C.S., of Barron, Harveys & Co., delivered his lecture on "From Mont Blanc to the Matterhorn." He also lectured to the Irish Assistants on November 9—on that occasion, however, giving his equally interesting lecture "The Scottish Alps."

* * * *

It has now been decided that the British Pharmaceutical Conference will meet in Belfast on the second Tuesday of August, 1898—that is, the 9th. The local committee have wisely suggested that the usual conversazione should be held on Tuesday evening instead of Monday, apparently because those who have to cross the channel would be compelled to leave on the Saturday in order to attend on the Monday. Might we suggest a reception of some kind on the Tuesday morning? Even if it were only to shake hands with the Chairman of the local committee and the President of the Conference when going into the meeting-place, that would be better than nothing, and it would make everyone feel at home. We speak for the quiet, retiring men who attend the Conference, many of whom return home feeling that they have not got into touch with the leaders. A committee representing the pharmaceutical and druggists' sections of the Belfast trade has been appointed, with Mr. R. W. McKnight, Apothecaries' Hall, Carlisle Circus, Belfast, and Mr. W. J. Rankin, 173 Lodge Road, Belfast as honorary secretaries.

* * * *

This week THE CHEMISTS' AND DRUGGISTS' DIARY for 1898 is published. It is sent free to all subscribers to THE CHEMIST AND DRUGGIST whose subscriptions are in force in December, consequently now is a good time to begin. The DIARY alone is not a bad return for the ten-shilling subscription. It is a book measuring 11½ inches long and 8½ inches broad, and contains 651 pages, the whole being handsomely and strongly bound in cloth, gilt lettered, with silk marker and pocket for loose papers. The information in it is most useful. There are legal notes including all about the sale of poisons, postal information, all about Government taxes, licences, &c., and, indeed, just the facts and hints which everyone in the drug trade needs to refer to occasionally or daily throughout the year. Besides, there is an original treatise entitled "The Art

of Pharmacy" containing all about the manufacture of galenicals in the following chapters:—

PREPARATION OF DRUGS. Methods of drying, grinding, sifting. **SOLUTION.** Conditions influencing solution, and apparatus employed.

SEPARATION OF LIQUIDS FROM SOLIDS.—Filtration, collecting the solid, expression.

EVAPORATION. Extracts, water-baths, steam and vacuum pans, &c., rationale of extract-making, liquid extracts, distillation.

SPECIAL APPLICATIONS OF SOLUTION. *Aquæ*, decocta, glycerina, infusa, concentrated infusions, liquors, syrups, tincturæ (maceration and percolation).

MIXTURES OF SOLIDS AND LIQUIDS. Emulsions, ointments, plasters, suppositories, powders, granular preparations, pills (including all kinds of coating), capsules (gelatine), compressed tablets.

The whole is illustrated with 193 engravings of apparatus. If you do not already get *THE CHEMIST AND DRUGGIST*, send your half-sovereign by return to the Publisher, *C. & D.*, 42 Cannon Street, London, E.C., and he will send you a copy of the *DIARY* and the numbers of the *C. & D.* for the year from December 4 as they are published.

Pharmaceutical Society of Ireland.

COUNCIL MEETING.

AT the meeting held on November 3, Mr. R. J. Downes (President) in the chair, the Council passed a resolution of condolence with Sir George Duffey in the loss of his son, Lieutenant Duffey, who died of yellow fever in the West Indies. After some casual matters had been disposed of, the Council proceeded to the election of a new member in place of Mr. Hodgson, resigned. It was suggested that the election might be postponed, and Mr. Hayes moved that Mr. S. P. Boyd should be chosen, but the President moved the appointment of Mr. William Burns, registered druggist, Ballinamore, co. Leitrim, and Mr. Burns was appointed by the casting-vote of the Chairman. Following this came the following appointments of examiners:—

Dr. H. C. Tweedy and Mr. Brown for the Preliminary examination.

Mr. John Smith for the materia medica and botany division of the Licence examination.

Dr. D. J. McKinney to conduct the Registered Druggist examination in Belfast.

Mr. James Guiler to conduct the Registered Druggist examination in Dublin.

Mr. W. Vincent Johnson to conduct the examination for assistants to pharmaceutical chemists.

There was some talk about imposing a fine upon those who give notice to attend an examination and fail to appear. The subject was referred to a committee.

Messrs. J. H. R. Brady, Dublin; J. J. Broderick, Fermoy; G. H. Carleton, Belfast; W. G. Mitchell, Londonderry; and Dr. J. W. Rice, Portarlinton, were elected members of the Society; and Messrs. R. Spence, Castleblaney, and M. Sweeney, Loughrea, associate druggists.

THE SCHOOL.

The Privy Council have authorised the following schedule setting forth regulations which are to be added at page 134 of the Calendar for 1897 of the Pharmaceutical Society of Ireland:—

X. That the School Committee arrange the holding of meetings of an educational character at intervals, and, as a stimulus to study and research, may appropriate, with the sanction of the Council, the profits from the school fund for the purpose of prizes or expenses.

XI. Members and registered students shall be admitted free to all such meetings, except lectures, admission to which shall be at the discretion of the committee.

XII. That, for the purposes of these meetings the School Committee may obtain the assistance of a committee of six, to be elected by and from the members attending such meetings, one of whom shall act as honorary secretary, for the purpose of keeping minutes and correspondence.

PRELIMINARY EXAMINATION.

The following are the subjects of examination in elementary theoretical chemistry, which has been made a compulsory subject:—

Chemical action: Illustrations and examples; simple and compound substances; atoms and molecules; chemical symbols and nomenclature; formulæ and equations; general nature of acids, bases, and salts. Combustion: Structure and properties of flame. Water: Proofs of composition; methods of purification. The air: Its constitution; reasons for considering it a mixture and not a compound. The chief physical and chemical characters, with methods of preparation of the following elements and compounds:—Hydrogen, oxygen (and ozone), nitrogen, carbon, chlorine, sulphur, nitrous oxide, nitric oxide, nitric acid, ammonia, carbon dioxide, carbon monoxide, marsh-gas, olefiant gas, hydrochloric acid, sulphur dioxide, sulphurous acid, sulphuric acid, sulphuretted hydrogen.

DISPENSERSHIPS IN H.M. NAVAL HOSPITALS.

We are requested by the Registrar to call the attention of all pharmaceutical chemists to the fact that a competitive examination for one vacancy in the above, open to pharmaceutical chemists not exceeding 25 years of age, is to be held in Dublin, commencing on January 4 next. Applications must be lodged, not later than December 17, with the Secretary, Civil Service Commission, Westminster, from whom and from the Registrar of the Pharmaceutical Society full particulars may be obtained. The remuneration to begin with is about 100% a year.

November.

FOUR numbers of *THE CHEMIST AND DRUGGIST* were published last month. Each one of them contained the news of the week of publication and many important articles besides. We mention a few of the more important matters below, but it may once more be noted that the following are sections of the journal which are given weekly:—

Bankruptcies and Failures
Business Changes
Colonial and Foreign News
Coming Events
Correspondence:—Letters to the Editor and replies to queries
Deaths
Deeds of Arrangement
Editorial Comments
English News
French News
Gazette
Irish News
Legal Reports

Marriages
New Books
New Companies and Company News
Personalities
Scotch News
Trade-marks Applied for
Trade Notes
Trade Reports
Winter Session:—Reports of the Meetings of Pharmaceutical Associations in England, Ireland, and Scotland, with the papers contributed.

Advertising Ideas.—A series of useful notes on new notions in advertising.

Brewers' Exhibition.—Notes on the exhibits which are interesting to the aerated-water and drug trades.

Chemists' Associations.—A contributor describes the amusing attempts made to put life into a little local concern.

Cutting and the P.A.T.A.—Lengthy and interesting correspondence by Messrs. Day, Beecham, Glyn-Jones, and others about profits and cutting.

Fluorine.—All about the liquefaction of this most obstinate gas by Professor Dewar.

Formulæ are as numerous as ever, and cover all departments of the trade.

General Medical Council.—Report of the autumn meeting.

Gregory's Powder.—Facsimile of Dr. Gregory's original prescription.

The late Mr. H. G. Hotchkiss.—Portrait with some particulars of his life.

Japan.—Particulars about the chemicals imported from the U.K. and elsewhere.

Johannesburg and South Africa.—Drug news from these quarters.

Leeches.—Interesting note on origin, uses, and anatomy.

Medical Gleanings.—Practical hints on the treatment of asthma, pulmonary catarrh, lumbago, and ringworm.

Novelties.—A large number of saleable goods are described and illustrated, and "Our Town Traveller" tells about the Christmas goods on view in London.

Pepsin.—Dr. Charles Symes shows that alcohol does not interfere with peptic digestion. Correspondence between Dr. McWalter, of Dublin, and him on that point.

Suppositories.—In addition to the prescription discussed at 67 Lower Mount Street, Dublin, and mentioned elsewhere, there are notes on the sizes and inaccuracy of moulds, &c.

Water-analysis.—Paper by Mr. D. B. Dott on the significance of nitric nitrogen in drinking-water.

"Year-book of Pharmacy."—Review of the new volume of the B.P.C. Annual, and of other works.

Suppository-making.

AT the first "private" evening meeting of the Pharmaceutical Society last month, the President submitted the following prescription:—

Morph. acet. ...	...	...	gr. iv
Hazelin. ...	...	...	℥ 80.
Ext. bellad. ...	...	...	gr. vj.
Cocain. ...	...	...	gr. iv.

M. Ft. suppos. xij.

A general discussion followed, the result of which was a common opinion that the prescription could not be dispensed as a 15-gr. suppository, that the hazeline should not be treated with heat, and that the best way would be to blend with oxide of zinc and place in hollow prepared suppositories.

These facts having been published in the *C. & D.* of November 13, Mr. H. Roberts, of Southport, wrote to us a letter, published in our issue of the 20th, and sent along with the letter a dozen of good 15-gr. suppositories containing the ingredients. In his letter Mr. Roberts said as regards the discussion:—"In the first place it is possible to make twelve 15-gr. suppositories out of the prescription, with simply ol. theobrom. q.s., and I submit the result to you, 'the proof of the pudding being in the eating.' Secondly, it is ridiculous for anybody to introduce into a prescription another medicinal substance, such as proposed (zinc oxide), without getting the consent of the prescriber; and no mention is made of this. I write this because I think it important that neither of the above decisions, emanating, as they do, from a learned body of men, should go unchallenged until verified." We asked definitely if the whole of the hazeline was in the suppositories, and to that Mr. Roberts replied as under, which letter and Mr. Johnston's we reprint from our issue of November 27:—

SIR,—In a foot-note to my letter you say, "Does our correspondent mean that in each suppository there are $6\frac{1}{2}$ minims of hazeline, and that there was no volatilisation while making the batch?" That is exactly what I mean. This is how I made them. To the morphia and cocaine in powder I added the proper quantity of ext. bellad. in dry powder and rubbed the whole down on a slab with the 80 min. hazeline gradually. To this I added, also gradually, the ol. theobrom. previously melted, mixed the whole well with a spatula, transferred to a tin, warmed over water-bath, and poured into the mould. No volatilisation could go on while rubbing down on the slab, for it was cold, and the oil soon congealed. The time taken for warming up again in the tin was just 45 seconds. I noted this as I was anxious to avoid over-heating, both on account of the belladonna and hazeline. I think, therefore, I may fairly say no volatilisation occurred then. Not that I think a little heating over warm water for a short time could harm the hazeline, for I notice that B., W. & Co. in their directions say it may be sprinkled on flannels wrung out in hot water, and I should think that a greater application of heat than the above. As regards there being no odour of hazeline, that is easily explained. I noted, on rubbing it down with the belladonna, that the latter almost covered the odour of the hazeline, and that on adding the oil the smell of the hazeline could not be detected.

Yours faithfully,

Southport.

H. ROBERTS.

SIR,—I am very much surprised to see your correspondent's letter *re* "Suppositories," in which he states he dispensed, according to his *modus operandi*, a suppository to contain $7\frac{1}{2}$ minims of hazeline. When he states he rubbed it up in the usual way, I presume he means by heating the cocoa-butter and rubbing in the hazeline. I question the amount of hazeline when finished. I may mention for his edification that they had previously been tried, and found an utter impossibility to our satisfaction—*i.e.*, as a 15-gr. suppository. But had we wished to dispense the prescription as your correspondent directs I am sure our results and his would be identical, but our desire was to dispense the prescription to contain the requisite amount of hazeline, and to do so our only way out of the difficulty was by a cold process, using some inert powder to absorb the hazeline and dispense as 30 gr. As to his suggestion about our using any medicinal substance otherwise than prescribed, may I ask what is dry extract of belladonna? May I suggest to your correspondent to ask himself will $7\frac{1}{2}$ gr. of cocoa-butter absorb $7\frac{1}{2}$ minims of a liquid? The melting-point of cocoa-butter is 95° F., and supposing he does not exceed that, will hazeline, a spirituous liquid, not volatilise?

Yours truly,

W. VINCENT JOHNSTON.

Dublin, November 21.

There is nothing very surprising in Mr. Roberts's success. Cocoa-butter can be made to take up its own volume of water, so can beeswax. Hazeline is not a highly spirituous fluid, but its active principle is volatile at the temperature of boiling water.

In THE CHEMIST AND DRUGGIST for this date is published a letter by Mr. R. J. Downes, President P.S.I., in which he describes the method by which he compounded the prescription, and turned out better suppositories than those made by Mr. Roberts.

News of the Month.

Drug-contracts.

The Local Government auditor has drawn the attention of the Lismore Guardians to the fact that their drug-contractor charges them 2d. per lb. for linseed meal and Kilkenny Union 6s. 8d. per cwt.

At a recent meeting of the Dungarvan Board of Guardians, Mr. Williams wrote that owing to the departure of Mr. Holland, the drug and medicine contractor, arrangements for a new appointment should be made. Messrs. Boileau & Boyd, Dublin, wrote stating that they were willing to take over the contract for the remainder of the year on Mr. Holland's terms. The Clerk of the Union said that would only complicate matters, and it was decided to advertise the vacant contract.

Messrs. John Clarke & Co. (Limited), Belfast tendered for the medicine-supply to the Mohill Guardians, and when another tenderer (Mr. White, of Sligo) got it for about 40 per cent. higher than they, Messrs. Clarke laid the facts before the L.G.B., who wrote to the Guardians. In the discussion on the matter the majority of the Board declared that they voted for Mr. White because they had found his bills had come much under those of their previous contractors, and they did not feel themselves competent to judge of the general effect of the tenders. A motion to rescind the contract and give it to the lowest tenderer was lost.

The Governors of the Westmeath County Infirmary have discussed the question of advertising the medicine-contract to the Board. The Registrar reported that the medical officer had been asked to furnish a list of the articles mostly in use, but had refused to give it on the ground that there was an order on the books dated April, 1886, for all medicine to be procured from Messrs. Boileau & Boyd, Dublin. Owing to the doctor's refusal to supply the list, there was nothing to guide him in issuing the advertisement. One of the Governors said the order of 1886 was a censure on the local chemists, and moved that it be rescinded. The matter was deferred until the next meeting.

Unofficial drugs appear to be vexing the Unions. The question started at the South Dublin Union on October 23,

and was resumed at the meeting on November 4, when it transpired that the whole trouble arose through an objection by the L.G.B. to the purchase of 2 lbs. of pulv. amygdalæ co. and 2 lbs. of Easton's syrup, as the articles are not in the authorised list of medicines. Mr. Byrne said the doctors were best qualified to know what a patient wanted, and that the action of the L.G.B. was monstrous. Dr. Stafford, L.G.B. inspector, said the Board gave the doctor the full run of the Pharmacopœia, which included 342 drugs, and the doctor who could not find that number sufficient for the treatment of his patients was to be pitied. The L.G.B. would not allow the cost of the items, but the Guardians drew up an appendix to the official list asking the medicines to be authorised by the Board. The curious point about the matter is that pulv. amygdalæ co. is in the B.P., and so is every ingredient of Easton's syrup.

Next-door Responsibility.

At the Belfast Quarter Sessions on November 12 an action was brought by Mr. Robert Morrow, pharmaceutical chemist, 25 Corn Market, against Messrs. William McCammond & Son, builders, to recover £l. 4s. 6d., the value of a number of incandescent gas-mantles, &c., which plaintiff alleged were broken by the defendants' workmen. The defence was a denial of carelessness, but his Honour held that negligence had been proved, and granted a decree for the full amount claimed.

Compensation for Disturbance.

The following are the amounts granted to Dublin drug-firms for damages done to their premises by the crowd on Jubilee night:—Messrs. Hayes, Conyngham & Robinson, Grafton Street branch, 21l.; the Apothecaries' Hall, Mary Street, 4l. 12s. 6d.; and Mr. John P. Lapham, Mary Street, 6l.

Rival Baking-powders.

The injunction proceedings brought by the Royal American Baking-powder Company to restrain Messrs. John Young & Sons, of Belfast, from selling Royal baking-powder so as to represent it to be an article manufactured by the plaintiffs in America and sold in Great Britain, came again before the Vice-Chancellor at Dublin on November 18. Defendants' counsel stated that an affidavit had been put in, and it was desired either to exclude that affidavit or that an opportunity should be given for answering it by an adjournment, so that both parties might be prepared to have the action finally disposed of at once. The Vice-Chancellor granted an adjournment for a week.

The arguments in the appeal case of Wright, Crossley & Co. v. Dobbin & Co. (Limited) were concluded in the Queen's Bench Court, Dublin, on November 22. Defendants were summoned for selling Royal baking-powder manufactured by the Royal Baking-powder Company, New York, with the word "Registered," in connection with the word "Royal," on the label, when in fact the New York Company had no registered trade-mark in the United Kingdom, although they had in America. The Court reserved judgment.

Personalities.

Sir Henry Cochrane has given 5,000l. to the Irish Agricultural Society.

Mr. W. A. Maxwell, M.P.S.I., has resigned his seat on the Dalkey Township Board of Commissioners.

Professor Titchborne has been re-elected representative of the Apothecaries' Hall on the General Medical Council.

Dr. James O'Shaughnessy, J.P., Limerick, has been appointed Deputy-Lieutenant for the city and county of Limerick.

Mr. Wyatt, L.P.S.I., Thomas Street, Dublin, obtained two silver medals for exhibits at the Dublin Y.M.C.A. Camera Club last month.

The Honorary Degree of M.A. has been conferred upon Professor Whitla, L.A.H., of Queen's College, Belfast, by the Royal University, Dublin.

Sir Robert Jackson, C.B., Governor of the Apothecaries' Hall of Ireland, has been returned at the head of the poll as a Commissioner for the Pembroke Township, Dublin.

The late Mr Thomas Collins, ex-Pharmaceutical Councillor, and one of the founders of the Pharmaceutical Society of Ireland, by his will left 450l. to various churches and charities.

Mr. Joseph L. Hogan, of Messrs. Graham's State Pharmacy, Dublin, was on November 1 publicly presented with the honorary testimonial of the Royal Humane Society for conspicuous bravery.

At the recent examinations of the Royal University of Ireland Miss Helen S. Laird, daughter of Mr. John Laird, M.P.S.I., of Limerick, took the degree of B.A., with honours in physics and chemistry and an exhibition.

Mr. E. M. Hodgson, M.P.S.I. (McMaster, Hodgson & Co., Capel Street, Dublin), has been re-elected a Commissioner of the Rathmines Township, and his fellow commissioners have recorded their appreciation of his abilities by electing him their Chairman.

Trade Notes.

Messrs. May, Roberts & Co. are now attaching a coupon to each box of Dr. John Hooper's Female Pills; and to encourage the sale of these they offer prizes of 5l. 5s., 3l. 3s., and 2l. 2s. to the three persons who send to them the largest number of these coupons before June 30, 1898.

Messrs. Hayes, Conyngham & Robinson (Limited), of Dublin, have just placed 600 metal advertising-tablets on as many stations in Ireland. The tablets advertise Conyngham's coca-wine—which is a favourite in the Green Isle—and are exceedingly handsome, being 8 feet long by 2½ feet deep, and the white scroll in the centre, which bears the name of the article and a device, fixes the eye at once. All the stations in Ireland are to have one of the tablets.

Is it right to call clove oil distilled in Ireland "ol. caryoph. Ang."? Perhaps we may take it that the suffix merely implies that it is not foreign, but distilled in one of the countries in which the British Pharmacopœia is in force. The Pharmacopœia, by the way, is far from satisfactory on these points, so far as Ireland is concerned; it refers, for instance, to plants "cultivated in Great Britain," and always forgets to add "or Ireland." But this is taking us from the point of this note, which is that we have received from Messrs. P. A. Leslie & Co., 36 Bride Street, Dublin, a sample of oil of cloves distilled by themselves, which for colour and odour cannot be distinguished from the "ang.," although it is ol. caryoph. hibern. It is an excellent oil.

Business Changes.

Meldon's Drug and Chemical Store in Thomas Street, Dublin, is closed.

Messrs. Richardson, Brothers & Co., Belfast, have converted their chemical business into a limited-liability company.

Mr. A. J. O'Shea, L.P.S.I., has opened a handsomely fitted pharmacy at 132 Donegall Street, Belfast.

Messrs. Richard Smith & Co. (Limited), wholesale drug oil, and colour merchants, 69 to 71 William Street, Limerick are removing to Sarsfield Street and Honan's Quay in the same city.

FAILURE.—David Ferris, druggist, Armagh, was examined on November 5 in the Bankruptcy Court, Dublin. The wife of the bankrupt, and Samuel Stevenson, an assistant, deposed that none of the furniture in the house had been removed subsequent to the date of the adjudication. Some carpets had, however, been taken away, and a cow sent to a neighbour. All the beds in the house were claimed by Mrs. Ferris as her pre-marriage property. The bankrupt gave evidence regarding the house generally, and the examination concluded.

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DD. Cases of 100 pieces, Toilet shapes, £5, averaging $1s.$ each, to retail at $1s. 6d.$ to $2s.$ each.
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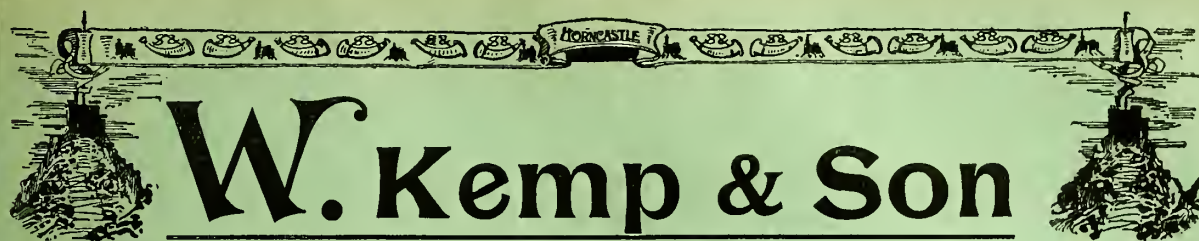
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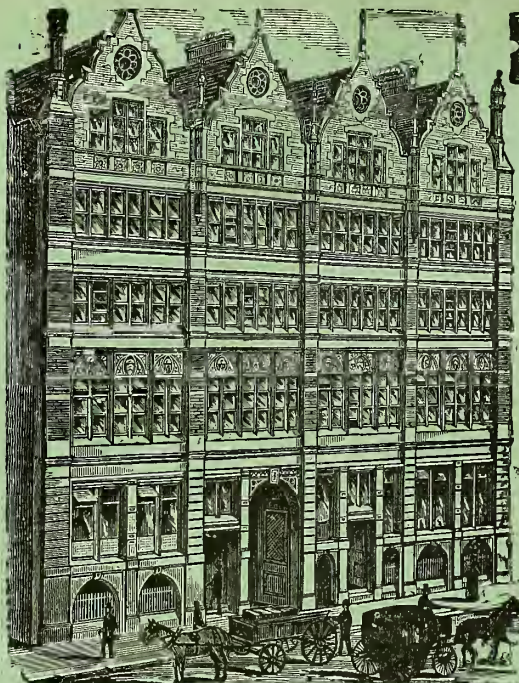
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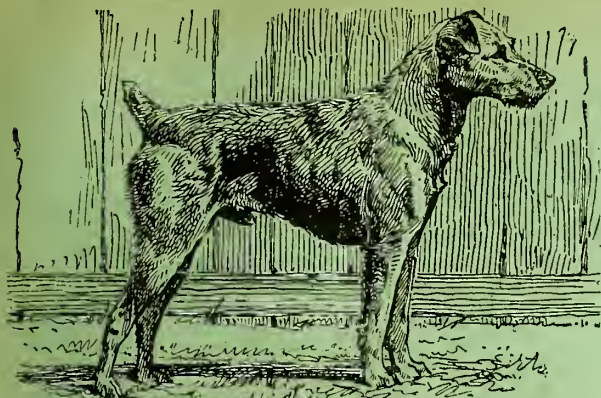
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